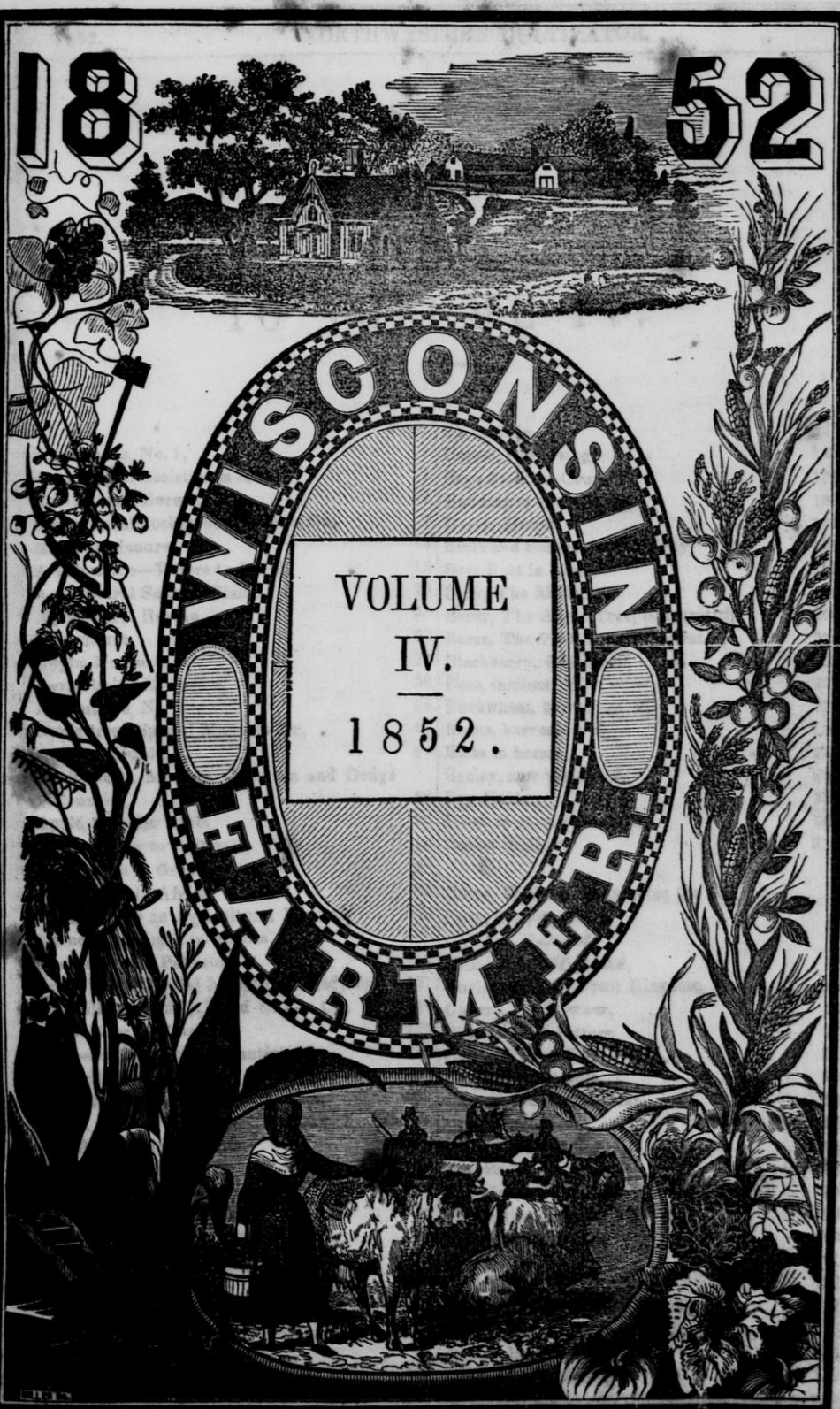
Wisconsin farmer and northwestern cultivator. Vol. 4 1852

Racine, Wisconsin: Mark Miller, 1852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WISCONSIN
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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. 4. JANESVILLE, WIS., JANUARY, 1852. NO. 1.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER,

TERMS:

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OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

AGRICULTURE, NO. 1.

THE BEARING OF EXHIBITIONS ON THE FARMING INTEREST.

We rejoice in all the tendencies of improvement, and in the indications of real progress in the great leading profession of agriculture, and it ought to be a matter of congratulation among the true tillers of the soil, who have so zealously and perseveringly wrought with reference to this end, that this profession is fast being redeemed from its low and debased condition and elevated to its true position among the callings of men. The discoveries of the age, the developments in science, the improvement in the arts, have all combined to exalt and enoble agriculture and to promote the farming interest. It is now seen that it is no small matter to be a farmer; and that to succeed as one, and to excell in the various branches of agriculture one must not only hold the plow or drive but must study, investigate and practically apply what his judgment shall determine to be sound and useful knowledge.

It has been well remarked that this is an age of exhibitions. We have mechanic's fairs, county fairs and cattle shows; horticultural, and pomological exhibitions, state fairs, national fairs, and last, though not least, the great WORLD'S FAIR, at London, soon to be transported, it is believed, to the shores of the new world. "And this is well—nay, it is inspiring. It proves the growth and diffusion of a wider and deeper consciousness of the importance and dignity of labor as an element of national strength and social progress * * * A nation flourishes or withers with the development and vigor of its industry. It may prosper and be strong without statesmen, warriors, or jurists; it fades and falls with the decline of its arts and its agriculture." A great truth is here uttered, but the world has been slow to recognize it—there is now a wider and truer recognition of it, and it is entering more and more into the broad and elevated views which will work out the social redemption of all lands beneath the sun.

We are glad to see the noble position that is being assumed by our own state with reference to agriculture, and the multiplying evidences that it will not be found laging in the great race of improvement. The organization and first exhibition of a state agricultural society have been attended by excellent results. There is now an awakened interest, consequent thereupon, that will not die away—county organizations have widely sprung up—fairs have been holden, meagre, it is true, in some instances, and all these have conspired to induce the most satisfactory effects.

Agricultural Societies in Iowa.

The farmers of Iowa are beginning to move in the formation of agricultural societies and the holding of fairs. The people of Van Buren county are the pioneers in this movement. A county agricultural society has been organized and their first annual fair held. The following named persons were elected officers:

A. H. McCray, President.
Robert Meek, Sen., Vice Pres.
H. C. Caldwell, Sec'y.
Hon. E. Main, Treasurer.

Timothy Day, A Van Vleet, W. S. Wright, James E. Miller, and Asa E. Phillipps, directors.

From the following, which we extract from

a lengthy notice of the fair, in the Keosauqua American, we infer that a good beginning has been made by the farmers of Van Buren Co.; and that the right spirit is abroad among them. Let other counties in the state follow suit, until there is not one left without an agricultural society.

"The exhibition of stock was much larger than we had anticipated; and among it we noticed some very good cattle. Several yoke of oxen remarkable for their symmetry and beauty, and others for their extraordinary size, elicited our attention. A number of very excellent cows also were on exhibition, and one or two bulls of superior blood; but the calves —a goodly number—seemed to attract the most attention amongst the horned animals. Several of this latter class would have appeared to advantage in any of the eastern state agricultural fairs. We were much pleased with them; belonging to *"the rising generation,"* they promise well for the future!

We, however, cannot close this hasty sketch, without alluding to the fine fruit exhibited by Judge Meek of Bonaparte. The Judge presented several varieties of apples from his orchard which we regard as equal in size and deliciousness of flavor to those grown in any part of the world. His Rambo and Æsopus Spitzenburg apples we pronounce first rate.—Judge Meek also exhibited some domestic wine of fine flavor, and pronounced by competent judges, an excellent article.

Take it altogether, we must pronounce the exhibit *a good one.* It was even *better* than we had hoped. When we reflect that it was but the *beginning;* that it was but recently suggested, and suddenly sprung upon the farmers; and, when we remember also, the very unfavorable character of the season which is just closing, all must admit that it was an extraordinary fair.

But what pleased us more and better than all, was the *real interest* manifested—the laudable spirit of emulation at work! These gives us a cheering earnest of what we may expect next year. All seemed in earnest; all ambitious to excel, and yet all were good natured. True, no doubt, some of the competitors for premiums may have differed in their judgment with the committees of examination, but this is always liable to happen and generally works no evil as it prompts to renewed efforts to surpass another year. Indeed, when the committees had pronounced their verdicts, all competitors seemed to say, "Well, we'll see *next* year!" The truth is, we are all better prepared even *now* for an agricultural fair than we were one week ago. By coming together and comparing stock, commodites, ideas &c., we understand better wherein we are deficient, what we want, and what we can and ought to do."

For the Wisconsin Farmer.

MINERAL POINT, Nov. 12, 1851.

I have for some time past thought of writing to you and now as one of your correspondents bids, I have "let drive."

In looking back over the Farmer I have been well pleased to think that the husbandman of the west, can, by a very little exertion, have such a help to his labors; but still it is not what it may be, if its subscribers will exert themselves and let you know their experience. You say you are bound to come out now. Let those that can, "help you out," then we will have (not one of) but the very best agricultural paper in the west. Mr. Editor, I was rather doubtful about your coming out in June and July, but was glad, indeed, to see the Farmer again. I had then almost determined to send for the Prairie Farmer, but those few words of his decided its fate. He says "We would not exchange for any other paper published." This looks too much like egotism.—I allow it is a valuable work; but, still, let others praise it, and not its own editor. I believe he has lost many subscribers by it.

Winter is near at hand, I therefore send you a plan of a hen house, on a plan, I believe, of my own, of 12 by 14 feet.

Description; *a*, *b*, *c* and *d*, outside walls; *e*, door; *f*, window with 6 lights of glass; *g*, hole for the chickens to go out; *h h h h* are roosts elevated 4 or 5 feet; *i i i* are rows of nests on one end and one side of the house, elevated 2 or 3 feet.

Description of fig. 2; the hole should be elevated 2½ feet above ground, as at *a* fig. 2, with a hole in the bottom at *a*; the roof, *c*, of the house will cover this, *d*, hole in the wall as at *g*, fig 1st, *e* roost; *b* section of front wall.

Advantages; Good circulation of air, and good light, both very essential to the well being of chickens.

2d; Clean and comforable nests; 3d, the roosts are placed to advantage for economy of the house; and 4th the hole to admit the chick-

Fig. 1.

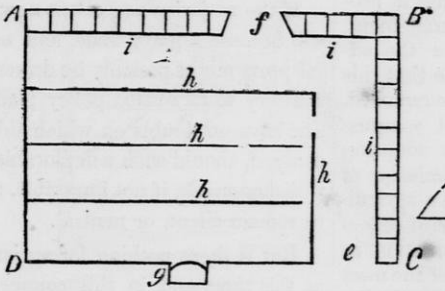
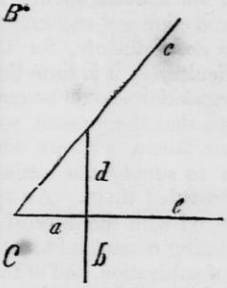


Fig. 2.



ens will prevent wolves, owls, &c., from entering and destroying them. By the way, the owls destroyed about 30 for me last winter, and this gave rise to the plan.

I would be glad to see more useful engravings in our Farmer. If every number was equal to the October number, it would be almost equal to our magazines in embellishments, and much better in its choice of subjects.

Mr. Editor; a few words to you and I have done. Although you gave me the pleasure to send twice for those11 numbers which I have; i. e: you sent 3 first and then neglected until you was again put in remembrance; I forgive you, and now I have received 2 numbers for October. By the by, I have made a good use of one of them. I have loaned it to my neighbors and have the promise of some subscribers. Please send me a prospectus enclosed in the Dec. number, or at any other time, and don't promise in it one jot or tittle more than you are determined to perform and I will use it for your benefit.

Yours, EDWARD PHILLIPS.

For the Wisconsin Farmer.

Agricultural Bureau.

The President has again reminded our national legislature that the specific interests of "Four fifths of our active population" have, heretofore, been utterly overlooked, or neglected by Congress.

We have seen millions annually appropriated to other interests, and have deemed it just and necessary; and even now, we have little thought of questioning the propriety of this policy, of protecting commerce and manufactures; it is all right—though the means be drawn, directly or indirectly, from the labor of the husbandman.

But it is *not* right, that the thoughtful and scientific inventor should pay the government for permission to enjoy for a space, his own productions—nor is it right that the first, and in every way, the most important interest in the nation—should be a forced pensionary of these often poor and hard-working mechanics.

Singular as the anomaly may appear, THE AMERICAN FARMER is represented in his government, by *a petty clerkship!*—smuggled—few can tell how—into the office of the commissioner of patents and supported out of the fund contributed by inventors!

And whose fault is this? OUR OWN—most decidedly our own—what scientific farmer have we ever sent to Congress? What enquiry have we ever made in regard to legislation for our own especial interests? Have we not even "ridiculed the idea of applying science to agriculture; and by our *acts* shown that we believed the farmer possessed of no worth, beyond honest industry, and frugal independence?

But let us hear what the President says of us.

"Agriculture may justly be regarded as the great interest of our people; four-fifths of our active population are employed in the cultivation of the soil, and the rapid expansion of our settlements over new territories, is daily adding to the number of those engaged in that vocation.

Justice and sound policy, therefore, alike require that the government should use all the means authorised by the constitution to promote the interests and welfare of that important class of our fellow citizens, and yet it is a singular fact, that whilst the manufacturing and commercial interests have engaged the at-

tention of congress during a large portion of every session, and our statutes abound in provisions for their protection and encouragement, little has yet been done, directly, for the advancement of agriculture ; it is time that this reproach to our legislation should be removed, and I sincrely hope that the present congress will not close their labors, without adopting efficient measures to supply the omission of those who have preceded them. An agricultural bureau, charged with the duty of collecting and disseminating correct information as to the best mode of cultivation, and of the most effectual means of preserving and restoring the fertility of the soil, and of procuring and distributing seeds and plants, and other vegetable productions, with instructions in regard to the soil, climate, and treatment best adapted to their growth, could not fail to, in the language of Washington, in his last annual message to congress, be the instrument of national benefit."

But will congress *act* upon this recommendation of the President? Politicians answer "*No*"—and why? I will give you the substance of a few answers of members of congress, and my inference drawn from this and the silence of others.

The whigs say, "We have been the first to revive this recommendation of the first president ; we have done all we could as the minority, we must leave the responsibility, and the *odium* of defeat, to our opponents." It is not for me to inquire how much more regard for *party* than for principles, may be involved in this answer.

And now, for "the party of progress." Our democratic friends admit that this is essentially a democratic measure, but they say "the whigs have got the start, in adopting it, and it would be poor policy for us, to pass it now, and thereby strengthen the hands of the administration."

There is certainly more candor than generosity in this reply, and we think as little *policy* as justice.

In the opinion of one, who has studied the politics of our country, for near half a century —and has not been blinded by mingling in the strife as a partizan for the last 18 years—the democratic party, should, out of liberal *policy*, as well as necessary justice to the agricultural interest — immediately make this measure *their own*, while it may yet be received *as a boon* from congress.

If the majority neg'ect us now, the measure will become a party issue, and our agricultuall press might possibly be driven to interfere, contrary to its settled policy ; and politicians can have no doubts on which side it would be arrayed, should such a deplorable event render it dishonorable, if not imposible, for our organs to remain silent, or neutral.

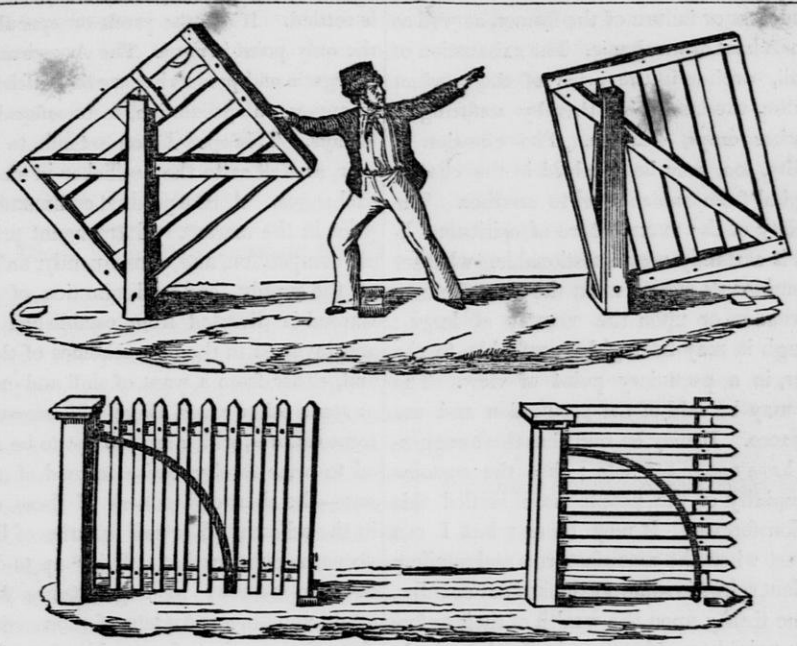
But is there nothing for agriculturists to do at this time, and in this connection? There *is* something that we *should* do. If we want this bureau we should say so. The easiest way is to write to members of congress, on the subject, that they may have some grounds for talking, and less excuse for not *acting*.— our press might, with propriety, make known the views of our thinking men ; but our agricultural periodicals are not read at Washington, and the best way would be, for STATE SOCIETIES to send deligates to Washington, as we have no one in congress, who may deem it his particular business,to advocate our cause ; and we should take such means as others find successful in getting a law through a legislative body.

Of one thing, we may rest assured—a bureau of agriculture, or a well endowed agricultural association, we can have IF WE ACT NOW. This is the long session, and there is time enough ; the succession to the presidency is not settled and we may easily make our rights an important element in the most desperate or the more promising chances of candidates,and,if I am not greatly mistaken, several of the wisest aspirants require only some certain encouragement from agriculturists to take the lead in doing us full and liberal justice.

A WESTERN FARMER.

☞ Mr. J. L. Fisk of Omro, has presented us with a beautiful specimen of Sweetwater Muskaline Grape, which he has cultivated on his place. The berry was very large and delicious. Mr. Fisk tells us that it grows with very little attention. He has in his garden a great variety of trees, plants, and flowers, among others, several varieties of pears, peaches, and other fruits, figs, and of house plants a large quantity of all varieties—which he will dispose of to those who want.

[Oshkosh Dem.



Hanging Gates.

Decidedly the most improved method in hanging gates we have ever seen is illustrated by the above engraving. Several of these gates have been erected in and about Racine within a few months and have a decided preference by those who have used them, over anything in the gate line that has come up before.

The N. Y. Farmer & Mechanic says :—'This improvement in hanging and operating gates was secured by letters patent to Thos. Parkinson of Ontario co., N. Y., Aug. 6, 1850, and has already gone into use in the western and middle part of this state, being adapted for farm purposes. They are so simple in their construction that any common farmer can make them with very little expense, as nothing but boards and nails are used—no mortices or tenons, nor iron in hanging ; but simply turning edgewise through an open post upon a single wooden pin as represented.

"Besides their cheapness these gates possess many advantages. In their operation they are exceedingly convenient, as a team can be driven close to them from either side on any grade. They save much trouble in opening—are safer, being entirely out of the way of the team in passing—can never be left ajar by careless shutting and swing open after leaving them, or be opened by the wind when thought securely fastened. They are less liable to get out of repair, as they, by their weight either when open or closed, do not strain themselves, or drag over the posts. They are less liable to be obstructed by snow or frost than any gate in use."

For the Wisconsin & Iowa Farmer.

The Cultivation of Tobacco.

The subject of the cultivation of the tobacco plant is, at the present time, exciting some interest among the farmers of this state; and the periodicals of the country are the medium through which the facts and opinions, in regard to its cultivation must and will be elicited. With what success that plant has heretofore been cultivated in this state, I am not able to say. But it is very certain that many circumstances must combine to render the cultivation of any crop profitable both to the farmer and the country, as that crop which yields the largest income for one year, is not always the most profitable for a series of years ; and a crop or production which always yields a fair return to the producer, many not be a source of profit to the country ; and *vica versa*. There are many items of profit and loss to be taken into consideration. There are many contingencies upon which may depend

The success or failure of the farmer, as well as the merchant or mechanic. The exhaustion of the soil, decline in the price of the product —fouling the land, and thereby unfitting it for other crops, &c., &c. The question of morality, too, may be involved in the change of capital from one channel to another. The propriety of the manufacture of spirituous liquors is certainly very questionable, whether we consider its effects upon the manufacturer and vender, or upon the country at large ; although it may be highly profitable to the former, in a pecuniary point of view. The same may be said of the production and use of tobacco. It may be said that these suggestions have come too late ; that the customs and cupidity of the people have settled this question forever. It may be so ; but I can recollect when the manufacturers and retailers of ardent spirits, in some portions of our country, became thrifty upon the wealth of their unfortunate neighbors, who were inclined to tipple too freely ; and the former were considered respectably engaged, although ruining their neighbors by scores and hundreds; and when temperance men dared to suggest the propriety of a different course, the answer was, "the question is settled, and the people *will* have liquor." Will the same answer satisfy the community at the present day? I think I have heard respectable physicians say, that the use of tobacco would ultimately prove equally as destructive to the human system as spirituous liquors, although not so prompt in its effects. Every lover of morality discountenances the manufacture of spirituous liquors, and the manufacturer is branded with the epithet of "unprincipled villain," whether disposing of his product at home or abroad ; and why? Because rum, gin, brandy, &c., are not only unnecessary for the sustenance of man, but highly prejudicial to his mental and physical system. The same objections are urged against the frequent use of opium. If then, the use of spirituous liquors and opium is prejudicial to the interests of the community, in every point of view, and the use of tobacco is equally as pernicious, why not discard it, and discountenance its production and manufacture? But I am told that the question of propriety is settled. If so, the profit or speculation is the only point in issue. The Americans, altho' energetic and preserving, are too much inclined to engage in speculation, to be safe calculators always. This speculation extends to the farmer, as well as to the trafficker in stocks and exchanges. A rare product commands a high price in the market. Extravagant prices create competition, and, consequently, an increase of the supply, and a diminution of price.— Capital is diverted from established sources, and invested in the new schemes of the day ; and, either from a want of skill and enterprise or some other cause, there will necessarily be some failures, which are too apt to be attributed to some foreign cause instead of the true one—the short-sightedness of those engaged in the scheme. The *evil* luxuries of life have no permanent market. It is "up to-day and down to-morrow," making fortunes for thousands, and distress for tens of thousands. But, since the question of propriety is settled, and people claim the privilege of eating and smoking that which the brutes refuse, let us talk of the climate of Wisconsin, as adapted to the growth of tobacco, and the profits arising from its production. It is said this plant will flourish in every state in the union ; if so, the climate question is partially settled. The next question is, what amount can be raised by the expenditure of a given amount of capital and labor, and upon a given quantity of land?— Can the tobacco planters of Wisconsin compete with those of Virginia, Kentucky, Tennessee and other southern states? Can hired labor compete with the slave labor of the south?— Even there, the growth of tobacco is said to be a source of but little profit, and the planters are continually drawing their capital from that branch of business, and investing it in the culture of sugar, and cotton, and stock raising. Is the quality of northern tobacco as good as that of the south ? Have we the same facilities for curing and manufacturing, and marketing, that our southern neighbors have?

All these matters should be taken into consideration, when the capital of a state is to be changed from one chanuel to another, altho' a diversity of crops is generally beneficial. I

should be pleased to read a communication from some one who has had some experience in tobacco raising. You may hear from me again upon the subject. In the mean time,

I remain Your ob't Serv't,

S. LOMBARD.

Green Bush, Dec. 18 1851.

Large Crops Without Exhausting the Soil.

Colman in his European Agriculture in an article upon agricultural education says: "No one will pretend that agriculture, even in the more improved form in which it is any where to be found, has as yet approximated the perfection of the art. The perfection of the art of agriculture is that in which the largest amount of product is obtained at the least expense of labor and manure, and with the least exhaustion of the land. Indeed there is reason to hope that we may presently reach a system of cultivation in which, though the crops may be large, the land itself shall not only not be exhausted, but be in a course of continual amelioration. I know well there must be a limit; but that limit no one can yet define. We know already that crops with large leaves, and therefore large powers of absorption, are commonly improving crops; and we know equally well that the growth of a forest upon land, so far from exhausting, is, in fact, an improvement of the soil. There is every reason to hope, therefore, that such a system of husbandry may presently be found, when without any extraneous aid, and from the resources of the farm itself, the largest crops may be obtained, and the powers of production extended. The system of nature every where, if man performs his duty, is a system of amelioration, and not of deterioration; it is every where a system of recuperative compensation, if man does not controvert or prevent its laws.

That our crops, for example, are not what they might be, is universally admitted. Within the last few years, crops of many kinds have increased immensely. A few years since, fifty bushels of Indian corn to an acre, was deemed a large crop. One hundred have frequently been produced. Thirty bushels of wheat has heretofore been deemed more than an ordinary yield. Fifty is now not uncommon. I have known sixty, and nearly seventy, to have been grown, and over a large farm, the crop to have averaged fifty-six bushels. Thirty tons of carrots per acre is the ordinary crop of a farm within my knowledge; and I have on my table before me the authenticated statement of eighty-eight tons of mangel-wurtzel to the acre. I am willing to admit that these are rare instances. Some of them may be considered as single instances; but it is obvious that one well-established case is as good as a thousand in demonstrating the practicability of that which is claimed to have been done."

Columbia County Agricultural Society.

At a meeting held in Portage City on Friday, Nov. 14, for the purpose of forming a county agricultural society, JESSE VAN NESS was on motion of A. C. Ketchum, appointed chairman, and JOAN A. BYRNE was chosen secretary.

The object of the meeting having been stated by the chairman,

On motion of J. Keer, a committee of three was appointed to draft a constitution, to wit: Joseph Keer, F. C. Curtis, and J. Guptil.

On motion of Mr. Ketchum, a committee of five was appointed to nominate officers, to wit: A. C. Ketchum, G. M. Bartholomew, J. O. Jones, —— Bushnell and J. Q. Adams.

On motion of J. Guptil, J. A. Byrne was appointed secretary of the committee appointed to prepare a constitution.

On motion of J. Q. Adams, Mr. Ketchum was appointed a committee to give notice of an adjourned meeting; and, with Mr. Carpenter, to procure and post up handbills for that purpose.

Mr. Keer moved that when the meeting adjourn, it will hold its next meeting at the school house, on Wednesday evening; which was agreed to.

The meeting then adjourned.

J. VAN NESS, Ch'n.

J. A. BYRNE, Sec'y.

An address was appointed to be delivered at the adjourned meeting, by Hon. JOSEPH KEER.

Pursuant to adjournment, the society met at the time and place appointed.

The committee appointed to draft a constitution, made a report which was accepted, and the constitution adopted.

The committee appointed to nominate permanent officers reported the following :

President—Jesse Van Ness, of West Point.

1st and 2d Vice Presidents—Joseph Keer, of Randolph ; T. C. Smith, Columbia.

Treasurer—Frederick C. Curtis of Loweville.

Recording Sec'y—John A. Byrne, Otsego.

Cor. Sec'y.—Henry Converse, Wyocena.—Which report was accepted and adopted.

On motion of Mr. Keer, a committee of three was appointed to draft rules and regulations.

On motion,

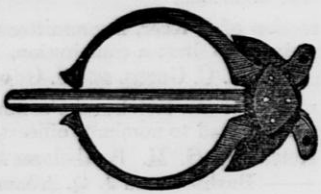
Resolved, That when this meeting rises it will adjourn to meet again at this place on the first Tuesday, in January next.

Resolved, That the proceedings be published in the River Times, Wisconsin Argus, Madison Statesman and Democrat, and Wisconsin Farmer.

JESSE VAN NESS, Ch'n.

JOHN A. BYRNE, Sec'y.

[The meeting was addressed in an able and forcible manner by the Hon. Joseph Keer, setting forth the advantage of an improved system of agriculture ; and by Thos. Clark Smith, of Columbus, to the same purpose.]



Spring Bow Pins.

This is the last Yankee contrivance we have had shown us, and so unlike anything we had ever before seen used, for the purpose for which it is designed, that we were put to our wits to guess its use. It beats the hickory and beach bow pins we used to make and use in times long since gone by, *some.*

It is as easily and quickly adjusted as a simple straight pin, and secures both itself and the bow against any ordinary contingency. The circular part is opened by pressing the thumb and finger pieces on the right of the engraving which allows the straight pin to pass through the hole in the bow, when the circle springs back and keeps the pin in its place.

SALE OF STAMPS.—More than six hundred thousand dollars worth of postage stamps have been disposed of by the department at Washington since the 1st of July, last.

Stowell Sweet Corn.

The editor of the Working Farmer, thus speaks of a new variety which he calls Stowell's Sweet corn, for the garden. He says it may be kept in a state fit to boil the year round. "It is every way superior to any other we have seen, for after being pulled from the ground, the stalks may be placed in a dry, cool place, free from moisture, frost, violent currents of air, (to prevent drying) and the grains will remain full and milky for many months. Or the ears may be pulled in August, and by tying a string loosely around the small end, to prevent the husks from drying away from the ears, they may be laid on shelves and kept moist and suitable for boiling for a year more.

"This corn is a hybrid between the Menomony soft corn and the Northern Sugar corn, and was first grown by Mr. Nathan Stowell, of Burlington, N. J. We purchased from Mr. S. a number of ears dried for seed, and he presented us with a few ears surrounded by the husks, grown the previous summer—the inner leaves of husks of which, and the corn and cob, were in as green a state as when pulled the previous August. Near the close of the fair of the American Institute, I presented the managers with two ears pulled in August, 1850. They were boiled and served up together, and appeared to be alike, and equal to corn fresh from the garden.

"The ears are larger than the usual sweet corn, and contain 12 rows. To save the seed, it is necessary to place them in strong currents of air, freed from the most of the husks, and assisted slightly by fire heat, when nearly dry. In damp places corn soon moulds and becomes worthless. The seed, when dry, is but little thicker than writing paper, but is a sure grower. The stalks are very sweet and valuable as fodder." The seed may be procured from Mr. Stowell, or from Prof. Mapes, editor of the Working Farmer.

CURE FOR SMUT IN WHEAT.—A correspondent of the Genesee Farmer, thinks he has discovered an entire new remedy for smut in wheat. His idea is worth considering, though it may not prove all that he claims for it:

I formerly harvested my seed very green, or in other words, before it was fully ripe, and made use of the same seed, and from that seed I always raised plenty of smut. At length my bump of caution whispered to me, "You cut your seed wheat too green," and from that time I have selected that part of my wheat field that ripens evenest, and let it stand until it is dead ripe, and until it appears weather

beaten, and I have raised no smut since I have followed the above rule.

Some seasons my wheat does not ripen even and if I find a green head when I am cutting my seed wheat, I throw it out ; for I am fully of the opinion that a small unripe grain of wheat, if it vegetates at all, will bring smut. Such a grain contains but a very small particle of vitality, and a strong solution of salt, vitrol or lime will sometimes destroy that vitality, so that the grain does not vegetate ; and here is where farmers are mistaken—they suppose they destroy the smut, when in fact it is the unripe, sickly grain which produces smut that they destroy.

Facts for Farmers.

Farmers about to build a dwelling, should know, that by carrying up a large flue in the chimney's back from the cellar, and having a window or two opening to the north or cold side of the house, out of the cellar, they can have as good a milk room under their houses as could be had over a spring that may be perhaps two hundred yards or one-fourth of a mile off, which is so unpleasant to go to in bad weather, especially by the female portion of the family.

The floor should be flagged with stone, as they can be kept sweeter or colder than even cement or brick, which absorb 'spilt milk,' and thus taint the atmosphere. The walls and ceilings should be plastered, to facilitate white-washing and cleaning. Nothing but milk and cream should be left in the room, as a pure atmosphere for cream to rise in, is absolutely essential for the making of sweet butter.

What is needed to have a cool, sweet cellar, is a current of air, which will be secured by the aforesaid flue and the open windows, as a strong current of air is at least ten degrees colder than the same air at rest.

Farmers ought to know that churning can be done with any good churn in from ten to fifteen minutes, as well in winter as in summer, by having the temperature of the cream right, say fifty-eight to sixty degrees.

The temperature of an ordinary sitting or living room in winter, to be comfortable, is sixty-five to sixty-eight degrees, and a closet, opening into such a room, would be the best place to keep the pot in winter. In the summer the cream can be readily reduced to the right temperature, by breaking up clean pieces of ice and putting into the churn.

A thermometer, which is necessary to regulate these matters, costs but one dollar, and such an investment every farmer ought to make who has churning to do, and thus save labor and time, which is money—and make this much dreaded part of the duties of farmer's wives and daughters much pleasanter and easier—and for this I know they would thank your modest correspondent if they knew him.

[Lewis Co. Rep.

Value of the Cabbage.

The cabbage abounds in muscle-forming ingredients, and it is therefore valuable as food for man or beast. A great amount of cabbage may sometimes be raised from a small piece of ground ; and we have heard some farmers say that on ground suitably prepared, they could raise a greater amount of food for cattle by putting in a crop of cabbages, than by devoting it to turnips, and the expense of raising the former is no greater than that of the latter. Cabbages are eaten greedily by cattle and sheep, and when fed to them in suitable quantities, with hay, in winter, they serve to keep them in good health and condition. For milch cows they are excellent.—They are also said to be good for swine. An exchange publishes the following :

"A gentleman remarked, in our hearing, a a few days since, that the cabbage was a valuable food for store hogs. The idea was new to us, and we inquired the manner of feeding. In reply he gave us the following as the result of his experience, the last summer. Having a fine patch of plants, and observing the bottom leaves beginning to decay, he directed his farmer to procure a water-tight cask, and gather a bushel of the lower leaves from the cabbage plants, and deposite them in the barrel, with a handful of salt and one quart of corn meal. On this was poured the contents of the kitchen swill pail, and the whole was suffered to stand undisturbed for twenty-four hours, when the process was repeated, with the exception of the salt—and so, every day, until the cask was filled with a mass of wilted leaves, about six quarts of corn meal, potato peelings, crumbs of bread, &c., from the kitchen ; all in a state of partial fermentation. He now commenced feeding it to the hogs, and they eat with greediness leaving other food for this. They were evidently as fond of mush, as ever 'Mein Heir' was of *sour-krout*. While the hogs were consuming the contents of the first barrel, a second was in course of being filled, and so alternately, till the stock of leaves was exhausted, which was about four weeks. This gentleman gave his opinion, that he could not have prepared any other kind of food for his hogs known to him, at double the expense, that would have produced results so decidedly ben-

eficial. An increase of appetite, improvement in their general appearance, and better heart, was the result of this method. The cabbages, he thinks, were greatly improved by plucking the redundant foliage; and he intends to plant a large patch of cabbages, the coming season, more fully to test the advantages of this kind of feed for hogs. We invite him, and others who may 'experiment' in the business, to give us the results, for publication."

[Maine Farmer.

Root Crops.

Some years ago, a great deal was said in favor of raising roots for stock, and many farmers went into the business to a large extent. They did not all realize their ardent expectations, and some have abandoned raising roots altogether.

There is no doubt that the value of root crops has been over-estimated by some, while others consider them unprofitable without having made a fair experiment. Some farmers who are situated near a large market, prefer feeding their cows on Indian meal, shorts and oil-cake, to raising roots for them; and in such places it might be more profitable to raise vegetables for market than to raise roots for cows, while other good food for them may be conveniently obtained at moderate prices.

But in the interior, where meal, grain, oil-cake, &c., are higher, we believe that many farmers will find it profitable to raise roots for stock. They are good for working cattle, growing cattle and milch cows; also for horses, sheep and swine. With roots, young cattle may be fed on coarse fodder, and kept in a thriving condition in winter, and they will be less liable to disease than if fed on dry fodder. Working cattle will be more healthy if allowed a moderate portion of roots. Milch cows fed partially on roots will give more milk and if the roots are of the right kind the milk will be rich, and they will be less liable to disease than when they are fed on other food. Horses are kept in a better condition, in winter when fed partially on roots instead of wholly on grain and meal, with the exception of hay. Sheep suffer much in winter from being kept so long from the ground, and meal and grain are not good substitutes for green food. Roots are better to keep them in good condition.

Animals are in the most thriving state when feeding on green herbage; and roots afford them a succulent food in winter, resembling the green food in summer, or at least it is the best substitute for it.

A great objection to raising roots crops is the expense in weeding, and this applies particularly to carrots, from the large number of plants that are necessary. But this objection may be obviated, in a great measure, by beginning in season, and preparing and manuring the ground late in the fall or early in the spring, and stirring it occasionally in spring, as the weeds start up, until the time of sowing, and soaking the seeds, and allowing them to remain in a moist state till almost ready to sprout, and then sow on a fine freshly stirred soil, and the plants will start before the weeds, and the weeding will cost but a trifle, compared with the old method. In this way a piece of carrots may be hoed with one-fourth the usual expense. [N. E. Farmer.

Acuteness of the Sheep's Ear.

James Hogg, the Ettrick shepherd, says: "The acuteness of the sheep's ear surpasses all things in nature that I know of. An ewe will distinguish her own lamb's bleat among a thousand, all braying at the same time. Besides, the distinguishment of voice is perfectly reciprocal between the ewe and the lamb, who amid the deafening sound, run to meet one another. There are very few things that have ever amused me more than a sheep shearing. We put the flock into a fold, set out the lambs to the hill, and then set out the ewes to them as they were shorn. The moment that the lamb hears its dam's voice, it rushes from the crowd to meet her; but instead of finding the rough, well clad, comfortable mamma, which it left an hour ago, it meets a poor, naked, shivering—a most deplorable looking creature. It wheels about, and uttering a loud tremulous bleat of despair, flies from the frightful vision. The mother's voice arrests its flight—it returns—flies and returns again, generally for ten or a dozen times before the reconcilement is made up."

Topography of Iowa.—The most elevated point in Iowa is the Coteau des Prairies, near the north-west corner of the state. It is only 1414 feet above tide water. From this point the country declines S. W. to the Missouri, and to the S. E. to the Mississippi. The Missouri river on an average has a water level, at a corresponding parallel of latitude, of almost double that of the Mississippi. This is favorable for railroad purposes, as vastly the largest burdens of freight will be eastward, which will be in the direction of the declination of the country. [Du Buque Herald.

Farming.

We often hear our farmers complain that farming in Wisconsin is poor business, and we undertake to say that this is entirely a mistake. That some make poor business of farming, we will not pretend to deny. And any business would be poor, if done as some do their farming. But as a whole, no class of men have done as well as farmers. The seasons it is true have been unfavorable for wheat for several years, but this should teach farmers not to place their sole reliance on one crop, when there is such a diversity which invite attention. Yet with all the bad seasons, failure in the wheat crop and everything else of which the farmer can complain, our farming community have made a more rapid advance in wealth than can be found in any country of the same age of settlement in the world.—Yes in the World! The county of Walworth commenced settling in 1836, and most of the people came here poor. But few have been here *ten* years, and from the last census, it appears that the average wealth of our farmers or families rather, in the different towns will vary from 1300 to 1800 dollars. Call you this poor? The farmers have certainly gained wealth faster than mechanics or inde d, than any other class. We cannot then see why these complaints unless it is because men are apt to think every body happier and better off than themselves. We apprehend that if our farmers would be a little more particular in reckoning their gains and losses they would be able to give a better account of themselves. For instance: Let the farmer furnish himself with a book. Let him at the commencement of the season enter his expenses on one column, charging for labor, seed, board, &c., and on another credit for all that he receives, and at the end of the year strike a balance. And while he is doing this let him set apart a portion of his farm book for general remarks upon the manner of doing this work—the season when his crops were put in and the amount of labor and care bestowed, and whether well or ill done. This will furnish means for improvement, and the advantage which this will afford will well repay all the trouble, and silence this clamor about the unprofitableness of farming.

We knew of one instance of that kind last year. The farm was put in at its cost as so much capital invested. Then the labor and board, cost of tools, &c., were added as stock in trade. On the other hand the avails of the farm was computed, and without counting the growth of stock anything, a clean gain of 25 per cent. was found on the side of gain. The losses incident to the season was also considerable. We believe many have done as well, and do not concede this a case of extraordinary gain. But a book was kept and a true statement of the results could be gained.

The fact is people are more apt to count the losses than the gains. If they lose a crop, they are disposed to count the season lost and nothing is said of how much has been gained in some other way. But in order to be secure against the loss of all, more than one crop should be raised. There should be a crop of winter wheat, of summer wheat, oats, corn, potatoes, &c. He should raise cattle, sheep, hogs, and horses. All of these crops will not fail at once, while if a reliance is made on one crop alone, if that fails all is gone. We should calculate that raising wheat alone would be about like lumbering, at which we never saw a man get rich. [Elkhorn Star.

Natural Water Purifiers.—Mr. Warrington has, for a year past, kept 12 gallons of water in a state of admirably balanced purity, by the action of two gold fish, six water snails, and two or three specimens of aquatic plant known as Valespeira sporalis. Before the water snails were introduced, the decayed leaves of the valesperia caused a growth of slimy mucus, which made the water turbid, and threatened to destroy both plants and fish. But under the improved arrangement, the slime, as fast as it is engendered, is consumed by the water snails, which reproduce it in the shape of young snails, whose tender bodies again furnish a succulent food to the fish; while the valesperia plants absorb the carbonic acid exhaled by the respiration of their companions, fixing the carbon in their growing stems and luxuriant blossoms, and refreshing the oxygen (during sunshine, in visible little streams,) for the respiration of the snails and fish. The spectacle of perfect equilibrium, thus simply maintained between animal, vegetable, and inorganic activity, is strikingly beautiful, and such means may possibly, hereafter, be made available on a large scale for keeping tanked water clean and sweet.

[Quarterly Review.

The Growth of Tobacco in New York.—The N. Y. times says: Mr. S. Stewart, of Suffolk county, Long Island, has raised this season quite a quantity of tobacco. It is all of good size, some of which is full seven feet high and seven inches in circumference at the cutting off place. Last year Mr. S. raised 2,130 pounds of leaf tobacco from a measured acre of ground. This looks well for Long Island.

HORTICULTURE.

Garden Manure Applied in Fall and Winter.

Frequent complaints are made by those who are limited in their gardening operations that whatever manures they do apply to their gardens, burn up their crops when the heat of summer comes on. We have felt this inconvenience too, and in looking around to find a remedy, have come to the conclusion that whenever a garden requires active stimulating manures, they should be applied in the fall, or winter ; in this way rank stable manure may be applied, and spaded or plowed under immediately. It will have become by spring the proper food of plants, and as all manures leach upwards, the surface soil will be in fine condition for the growth of vegetables; whereas if the manure is applied at planting time, especially the crude manures generally applied here, just as vegetables are most required, they are fired by action of the sun on the manure, and the gardener has the mortification to find his labor and money thrown away. Whatever manures are applied in the spring should be well rotted, or of a cooling nature. There are many families that annually waste a barrel or two of leached ashes, when had it been applied to the garden patch, they would have had "early yorks" as well as their neighbors.

The soap-suds from the wash tub is a manure that may be applied with safety and with profit in the spring, and yet how few use them except to enrich the earth around their kitchens, and make loathsome mudholes, when perfumed flowers, luscious fruits and mammoth vegetables, might have been made by them. We do not yet properly appreciate the importance of a garden. The bearing it has upon the happiness and health of a family is plainly perceptible whenever we find a well conducted garden ; how highly important, then, that we should understand the proper food of plants. He would certainly be a mad physician who would give his fevered patients stimulants to raise the fever higher and higher, until vitality was consumed. So with the gardener, plants are frequently stimulated to death, for the want of proper cooling food. Our garden soils can scarcely be too rich, but it must be a richness retentive of moisture, and not as would be the case if the stable manure was applied in the spring, be a richness which burned everything in contact with it. Ho, then, for your wagons and wheelbarrows, load them up, and cover your gardens quickly ;—plow them up, turn the manure under ; and when the early seed-time comes, you need not fear but a harvest will follow. [Col. Enq.

Highland Cranberries.

Cranberries in a low meadow are a very uncertain crop as the frost strikes there sooner than on high grounds and the fruit is spoiled after it is half grown, or the shoots, that come out in June, are nipped so bad that they bear no fruit.

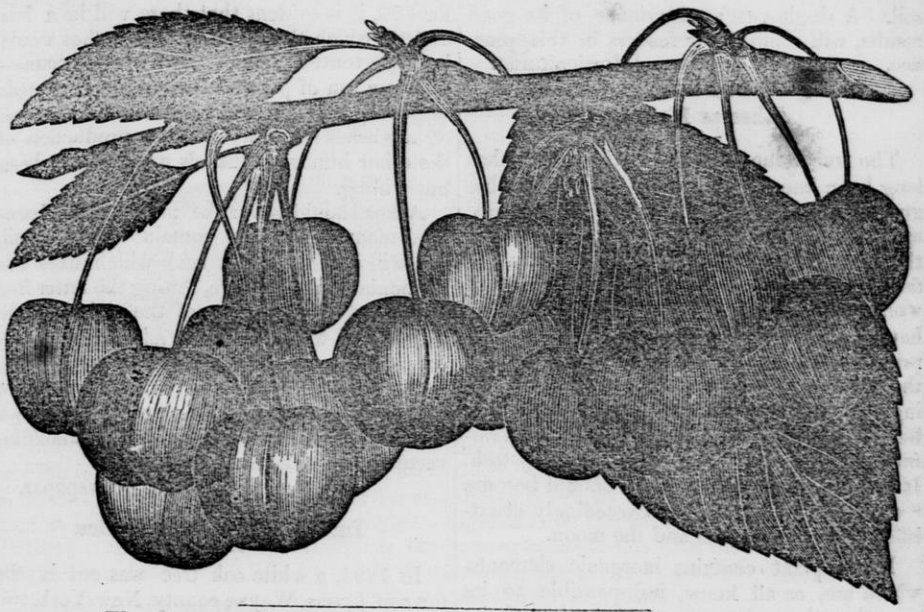
We have therefore made an attempt to introduce the meadow cranberry into our home garden, which has a sandy loam for a soil and is as free from moisture, as almost any of our soils are in Middlesex county. Two years ago we struck half a dozen rows across the garden fifteen rods long; we ran the plow twice for one row, turning the furrows away from each other and leaving a dead furrow in which we put a few loads of peat mud.

This was covered up by hauling back the furrows and making the surface even. A small quantity of manure was spread on the surface, vines were taken from a wet cranberry meadow. The mode of transplanting was this. A sharp spade was used to cut sods from six to eight inches in breadth. These sods were set in the gutters made in the garden, the surface of the sods being even with the surface of the garden. Some of the sods were transplanted in the fall and some in the spring.—The plants have now been growing in the garden for two seasons. The ground has been kept free from weeds and the plow has been run two or three times through the rows.

A few days ago we gathered some very fine cranberries from the vines. The berries had not been injured by the frost. They were made into as rich a sauce as we have ever tasted. And though the summer was exceeding dry the berries were quite as large as when the vines were in a wet meadow. The vines are spreading slowly and would cover the ground in a few years if we would let them, but we intend to have room for the plow to run between the rows and let the vines spread in the rows from hill to hill.

[Mass. Plowman.

A Curiosity.—The Boston Traveler has received what it calls "a great curiosity of the fruit kingdom." It is an admixture of apple and pear, which grew on a pear tree, the branches of which mingled with those of an apple tree. The fruit has partially taken the colour of the apple which grows upon the tree. It has the taste of the apple, but retains the shape of the pear. The apple which grows upon the tree is of a deep red.



The Downer Cherry.

This cherry, from its combination of excellent qualities, in tree and fruit, is one of the most valuable kinds that have become generally known to the public. The tree is very hardy, a good grower and a great bearer. It usually has a very vigorous and healthy appearance. The fruit is the most hardy of any kind within our knowledge. When we have had two or three weeks of wet weather, about the time the cherries ripen, we have noticed that while half the crop was rotten of many varieties, and the most tender kinds were nearly all spoiled, the Downer cherry was scarcely any affected. This is of great importance, as a great many cherries are lost by wet weather. This cherry was raised from seed by Samuel Downer, Esq., a veteran pomologist, of Dorchester, in this vicinity. It was budded with other cherry stocks in the nursery, but the bud failed, and the tree was allowed to grow and bear. Mr. Downer has raised several seedlings from the original tree, all of which resemble it very strongly, but are generally slightly improved in flavor.

The fruit is tolerably large and roundish, slightly heart-shaped; red, often mottled with yellow, light amber in the shade; stalk rather long and slender; flesh very tender, extremely juicy, sweetish, a slight mazzard bitter till fully ripe, and then very fine, rich and luscious. It ripens late with the Honey Heart, generally from the 5th to the 12th or 15th of July. The tree grows upright.

[N. E. Farmer.

Save the Dead Leaves.

Very few gardeners would be guilty of so foolish a thing as to waste barn-yard manure. But they are guilty of a waste not a whit less excusable. We mean the waste of dead leaves that fall at this season of the year, from trees and shrubs of all kinds. If every horticulturist would reflect for a moment on the nature of these fallen leaves—which contain not only vegetable matter, but the earthy salts, lime, potash, &c, needed for the next season growth—and that, too, exactly in the proportion required by the very tree or plant from which they fall—nay more, if they would consider that it is precisely in this way, by the decomposition of these very falling leaves, nature enriches the soil, year after year, in her great forests, it would scarcely be possible for such a reflecting horticulturist to allow these leaves to be swept away by every wind that blows, and finally be lost altogether.

A wise horticulturist will diligently collect from week to week the leaves that fall under each tree, and by digging them under the soil about the roots, where they will decay and enrich the soil, provide in the cheapest manner the best food for that tree. In certain vineyards in France, the vines are kept in the highest condition by simply burying at their roots every leaf and branch that is pruned off such vines, or that falls from them at the end of the season. In the same manner, the leaves that fall from young fruit trees should be carefully saved and dug in beneath the surface of the

soil. A single year's experience of its good results, will confirm our readers in this practice. [Horticulturist.

Ashes as Manure.

The true value of ashes to the farmer has long been known, and even now, is just beginning to be appreciated. The soap boilers' agents have long been allowed to carry away the most valuable fertilizer produced by the farmer, and leave in return poor brooms and worse tea. Many an anti-book farmer has hauled plaster to his farm, and paid a high price for the same, when there was a lack of the element in his soil, and he was but "carrying coal to Newcastle," while at the same time he sold his ashes for 10 cents per bushel, *nominal price*, his soil being exhausted of potash. It is no wonder that his lands should become "worn out," and himself exceedingly dissatisfied with the seasons and the moon.

Every plant contains inorganic elements, which are, as all know, indispensible to its growth ; these elements are the ashes of the plants. Those resulting from the combination of wood contain many of the most important of both the grain, grass and roots. Wheat and corn contain a large proportion of potash, consequently ashes are most valuable manure for these crops. Fifty-nine per cent. of the ash of corn is composed of the carbonate of potash (pearlash.) The abundance of this ingredient in wood ashes constitutes their great value as a fertilizer for that important crop, which value as a general rule is double that of plaster. I have used both, separately and mixed, and find that a compound of two bushels of ashes and one of plaster give a better result than either when applied singly. I take a small shovel with which I put about one gill upon each hill ; I carry the ashes into the field upon a barrow and use a pail to distribute them from. The best method of application, is to put it on the hills immediately after planting, which precludes the possibility of injuring the young plants, as is sometimes done by applying the mixture after they come up.—Corn to which this mixture has been applied will ripen several days earlier and a much greater yield than rows through the same field which are not so treated.

One half of the earthy matter of potatoes is pure potash, from which fact any person can see their value as a fertilizer of this crop. It is from a lack of potash that many farmers lose from 50 to a hundred bushels of potatoes per acre every year. If a farmer has in his soil potash enough to form 200 bushels of potatoes per acre, and other constituents sufficient for 300, it is evident that there will be a loss of 100, which the application of ashes would have prevented. Such cases often occur.—Yet in a ton of potatoes there is but 12 pounds of potash ; thus it will be seen that the cost of the ashes necessary for the production of the other hundred bushels would have been but trifling.

Ashes should never be mixed with barnyard manure, as they contain caustic alkali, and will neutralize the acid which fixes the ammonia in the manure, setting the latter free to the great depreciation of the value of the manure. I will conclude by advising my readers to save your ashes, *not for the soap boiler*, but as food for your hungry crops, and if you have any neighbors who prefer 12½ cents to a bushel of ashes, you will find it a profitable investment to make the exchange.

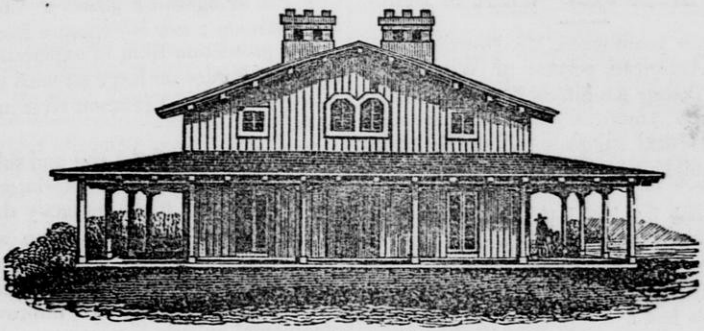
[Dollar Newspaper.

Interesting Ancient Relics.

In 1834, a white oak tree was cut in the town of Lyons, Wayne county, New York, two miles west of the village, measuring 4½ feet in diameter. In the body of the tree, about 3½ feet from the ground, was found a large and deep cutting by an axe, severing the heart of the tree, and exhibiting with perfect distinctness the mark of the axe at the present time. The whole cavity thus created by the original cutting was found to be encased by 490 layers of the timber, which had grown over it subsequent to the cutting. Consequently, the original cutting must have been made in the year 1373, or 118 years before the discovery of America by Columbus. The cutting was at least six inches deep.

An oak was recently felled, says a Pennsylvania paper on the north side of Muncy mountain, Lycoming county, Pennsylvania, which was found counting the growths, to be 460 years old, and to have been marked with a cutting instrument 360 years ago, the age of the tree being about 460. The instrument used in making these marks was probably a hard stone carved, or ground into a shape, bearing some resemblance to our axe, but much smaller in size. It is added that the marks are of such a nature as to leave no doubt that they were produced by such a cause.

THE BIBLE IN HUNGARY.—The Congregationalist says: "It is a pleasing fact that more Bibles have been sold in Hungary, within the last two years, since the revolution, than for any time during the previous twenty years, notwithstanding the mass of the people are so nearly beggared, by the losses of the revolution, and Austrian extortion.



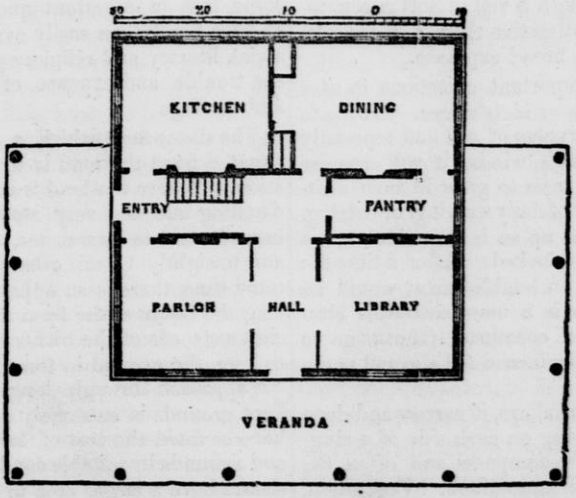
Country Farm House.

There is nothing in this elevation which could be objected to as out of keeping with rural life in most parts of our country. There are no useless ornaments, and there is no attempt at high or false architectural style.—Yet there is much beauty, we think, as the subject demands.

Our readers will notice, in the first place, that it has an ample veranda (or piazza, if our readers like this incorrect term better.) A veranda, as frequently built, with fluted columns, &c., is a costly affair. But this is not so. It is positively cheap. The supports are simple, light sticks of timber hewn octagonally or 8 sided, leaving a few inches at the top and bottom square, for base and capital. The roof of this veranda is made of joined stuff, nailed upon the joist rafters, which are bedded and left exposed, so that no other ceiling is required. The top may be covered with shingles or tin. The 2d story gives 7 cool and pleasant bed rooms of full height. The parlor and library are on opposite sides of the entry or vestibule, opening into it with either double or sliding doors, so that the whole may, when agreeable be thrown into one apartment. The arrangement of this floor may be changed by turning the parlor into a bed room, and using the library as a parlor.

A recess is indicated in the plan, where a sideboard is to stand in the dining room. This sideboard is to contain, in one of its portions, a wicket, i. e., a closet opening through to the kitchen, by which all the dishes may be received, and returned again, without the labor of carrying through the house.

The chimneys are all kept in the body of the house, and not allowed to expand their warmth in outside walls. The form of the house is a square of 40 feet, and the arrangement of such a space is so simple that it may be varied at pleasure. [Horticulturist.



GROUND PLAN OF THE ABOVE.

Domestic Architecture—Where to Build.

About four years since, Mr. Downing published an American edition of Wightwick's "Hints to Young Architects." In the introduction by the American editor there are some excellent practical suggestions on the topics, where to build, what to build, and how to build.

As the book has had but a very limited circulation in this part of the country, we propose to give, in a condensed form, the substance of his suggestions. And for the present, *where to build.*

Circumstance often compel us to build on a particular site ; yet it is often the case that the subject is an open question. These remarks are made on the supposition that the location is, to some degree, a matter of choice.

As to elevation, the best situation in an irregular country, (other things being equal,) is a middle elevation, half way between the low valleys and the high hills, sheltered on the north and east, and open to the south and west. Somewhat popular but objectionable sites, are the summits of moderate hills, conspicuous and commanding wide prospects—and selected for these two considerations. A wide panorama is indeed striking occasionally, but lacks the homelike feeling of appropriation, and for a home, has on the whole no advantage over agreeable views of more moderate extent, even though limited by the rich foregrounds of wide panoramas. The ambition of display is not a suitable motive in providing a home; and besides, the beauty of a residence is much enhanced by a due concealment rather than a bold and studious display. A dwelling gleaming through a veil of soft green foliage is far more attractive than a more elegant building in a broad exposure.

But there are important objections to sites on the tops of hills or high ridges. Owing to the comparative dryness of soil and especially the exposure to high winds, it will require twice the time for trees to grow in such a situation. The labor of daily walking, or driving, or drawing burdens up such an eminence, is a thing not to be overlooked. After a time the proprietor of such an establishment would be well content to live in a more accessible situation, and make an occasional pilgrimage to some neighboring eminence for a grand panorama.

The objection to valleys, if narrow and deep and especially if lying on each side of a sluggish stream, is the dampness and often the unhealthiness of the atmosphere. Vegetation, also, suffers earlier and more severely from the frost. The objection on the score of health does not lie against a broader valley with a rapid stream ; nor is exposure from frost, but rather protection from it, experienced in valleys that border on large streams or sheets of water, as upon the Hudson river and our great lakes.

The character of the soil and subsoil should receive attention. A wet, springy soil, unless capable of being made perfectly dry by drainage, will make a dwelling damp and unhealthy. A good loamy soil on a gravelly subsoil, is unexceptionable. The preferableness of such a soil even for purposes of improvement and ornamental culture is worth considering ; it is better to find, than to be obliged to make, a soil fertile.

The aspect of the dwelling is often fixed by circumstances. When at our option, the best aspect for the front of a dwelling is towards the fair-weather quarter ; its opposite the worst. In the United States generally these points are respectively, south-west and north-east.

The healthiness of a location ought not to be forgotten, whenever the question, where we shall reside, is an open one. In such circumstances we shall avoid the proximity of large, low morasses, swamps, or water courses, which by becoming dry in summer, engender malaria by exposing a large amount of vegetable matter to the action of a summer sun ; or any other known unhealthy locality.

A wise man will take into account the social character of the neighborhood ; the convenience of his residence to his business ; the facilities of access to neighbors, to schools, churches, markets. To a man of limited income, it is an important question whether he and his family can easily avail themselves of social, literary and religious privileges, without the trouble and expense of keeping a horse and carriage.

The distance at which a house should be situated from the road is worthy of consideration. Where the land is abundant, to force a dwelling into the very streets, is eminently inconvenient to its inmates, and disagreeable and unsightly to all other parties. At the same time, there is an opposite extreme ; placing the house so far from the road that the circumstances of the owner do not permit him to keep the ground in front in good condition. An approach through long walks and well-kept grounds is extremely pleasant ; but few have counted the cost of keeping such walks and grounds in suitable condition. No house should have a larger area in front than can be kept clear of all slovenliness and disorder.

[Family Visitor.

The Chemistry of Nature.

If we trace back the history of our world into those remote eras of which the early rocks are records, we shall discover that the same chemical laws were operating then which control the changes of matter now. At one period the earth was a huge mass of fiery fluid, which radiating or throwing off heat into spaces, gradually cooled, and became surrounded with a solid crust, entombing within a seething of chaos of intensely heated materials, which now assert their existence in the shock of the earthquake, and the awful outbreaks of volcanic fires. In latter ages, when the crust had cooled still more, and the atmosphere let fall its showers, the still heated surface, hissing and roaring with the contact of the flood was rent into enormous blocks and dreadful abysses—which still remain all over the world, and form the wondrous monuments of an age of great convulsions.

Later still, the seas gathered together, the rocky masses were powdered into dust by the delicate fingers of the dew and the showers, the green herbs sprang up, and the monsters of the slimy deep appeared in obedience to the Creator's fiat, and the whole earth became a home of beauty in obedience to chemical law. The ceaseless play of the elements, and the mutations of the atoms, has built up the whole into one gorgeous scene of luxuriance ; and man was awakened into being to render the whole subservient to his wishes ; and, by tracing out the harmonies of the natural world, to arrive at a more exalted knowledge of his Maker.

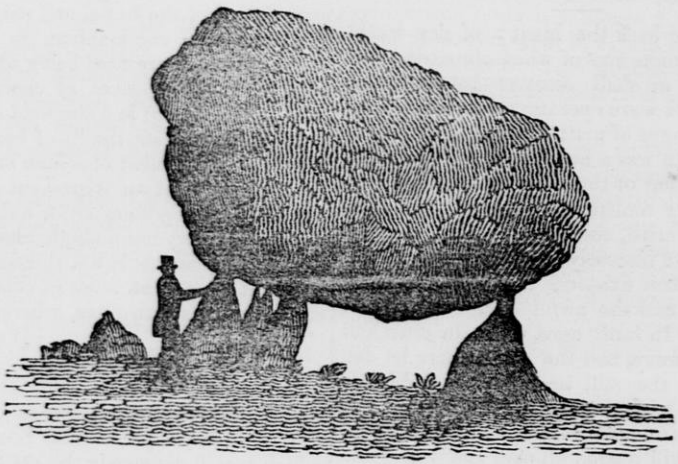
The atom of charcoal which floated in the corrupt atmosphere of the old volcanic ages was absorbed into the leaf of a fern when the valleys became green and luxuriant; and there in its proper place it received the sunlight and the dew, aiding to fling back to heaven a reflection of heaven's gold, and at the same time to build the tough fibre of the plant. That same atom was confined to the tomb when the waters submerged the jungled valleys. It had lain three thousand of years, and a month since was brought into light again, imbedded in a block of coal. It shall be consumed to warm our dwellings, cook our food, and make more ruddy and cheerful the hearth whereon our children play ; it shall combine with a portion of the invisible atmosphere, ascend upwards as a curling wreath to revel in a mazy dance up high in the blue ether—shall reach earth again, and be entrapped in the embrace of a flower—shall live in a velvet beauty on the cheek of an apricot—shall pass into the human body, giving enjoyment to the palate, and health to the blood—shall circulate in the delicate tissues of the brain, and aid, by entering into some new combination, in educing the thoughts which are now being uttered by the pen. It is but an atom of charcoal—it may dwell one moment in a stagnant ditch, and the next be flushing on the lip of beauty—it may now be a component of a lime stone rock, and the next moment an ingredient in a field of potatoes—it may slumber for a thousand years without undergoing a single change, and the next hour pass through a thousand ; and, after all, it is only an atom of charcoal, and occupies only its own place, wherever it may be.

[Family Jour.

A Great Discovery.—We saw, some weeks ago, in a Pennsylvania paper, an announcement that a motive power had been discovered which would supercede the use of steam. It is said that some facts have recently come to light, which entitles the statement to credit. Prof. Salonah, of Harrodsburgh, Ky., has successfully applied the power of carbonic acid gas, as a substitute for steam, in propelling enginery for every purpose. The power of this gas has long been known to chemists, but their inability to regulate and govern it, has prevented its use as a propelling agent. Prof. S. claims to be able to control it with perfect safety, and asserts that it will afford a power equal to steam, in one fourth of the space, and about one-hundredth part of the expense with both furnace and boilers. Experiments have recently been made in Cincinnati which are said to be entirely satisfactory.

[Nashville Banner.

The first American flag that was displayed in Great Britain. was hoisted on board the ship Bedford, Capt. Moore, of Nantucket. She arrived at the Downs on February 3d, 1783, passed Gravesend the 4th, and was reported at the custom house on the 5th. A London journal of 1783, states that "she was not allowed regular entry until some consultation had taken place between the commissioners of the customs and the lords of council, on account of the many acts of parliament yet in force against the rebels in America. She is loaded with 487 butts of whale oil, is American built, manned wholly by American seamen, wears rebels' colors, and belongs to the Island of Nantucket, in Massachusetts. This is the first vessel that has displayed the thirteen rebellious stripes in any British port.—The vessel is at Horsleydown, a little below the Tower, and is intended immediately to return to New England."



Mounted Boulder.

This cut correctly represents the singular position of a granite boulder, poised on limestone pillars. It is situated in the town of North Salem, Westchester county, state of New York ; near the Connecticut line. It was first described by the Rev. E. Cornelius, in the second volume of the American Journal of Science, and has since been visited by many individuals who regard it as a rare geological curiosity. The bolder is a feldspathic granite, compact, and of a reddish color. It weighs about 60 tons. This is ascertained by taking its dimensions, thus enabling us to determine its contents in cubic feet ; then weighing a fragment of it in the air, and again in water, we ascertain its specific gravity.—That is how much heavier it is than an equal bulk of water ; knowing the weight of a cubic foot of water, we thus determine the weight of a cubic foot of the rock ; which multiplied by the number of cubic feet it contains, gives us the weight of the whole mass. The size of the bowlder however, is not its peculiarity, for many others greatly surpass it in this respect. It is so firmly poised upon the points of the limestone pillars, that all efforts hitherto made to dislodge it have proved futile. The origin of its singular position has been the subject of much speculation. It has been suggested that it is a relic—perhaps an altar—of the aborigines of our country. It does indeed bear no slight resemblance to the Cromlechs seen in the west of England ; and these are unquestionably relics of departed races; tradition, and their connection with the Druidical circles, &c., clearly designate their origin, and use as alters and sepulchres. But no analogies favor the supposition of such an origin or use of our rock. We regard it as an instance of that transporting agency of diluvial ice, of which the earth's surface exhibits very many tokens, and by which masses of granite and other rocks were broken off from their parent ledges, and conveyed sometimes hundreds of miles. Such a floating rock might ground upon projecting points of the limestone strata, which are *in place* there, and subsequent disintegration of the surrounding rocks by atmospheric agency, may have placed the bowlder relatively higher. We have seen many "rocking stone," and fragments of rocks, fantastically piled up, but none which rival this in interest. [Fam. Visitor.

A Guinea Larger than God.— Robert Hall once wrote the word God on a small slip of paper, showed it to a friend and asked whether he could see it. He replied, "Yes." He then covered the word with a guinea, and again asked, "Can you see it?" and was answered "No." He did this to show his friend how easy it is for the world to shut out of the mind a sight and sense of God. A very small object placed immediately before the eye will prevent it from seeing the sun. This object thus placed does not extinguish its light, nor destroy its existence ; it is still in the heavens, diffusing its light through the whole solar system, though the eye of this solitary individual does not see it. He may imagine that the object near his eye is larger than the sun, but still it is a very small particle of matter. The love of gold may so fill the mind that there is no place left in it for the great God of the universe. In the view of such a mind a guinea is larger than God. This fact furnishes the following query. Does the world, or God, hold the highest place in our hearts? Which is the largest, a guinea or God?

]Puritan Record.

Iron Mines of Lake Superior.

The iron first showed itself, as we approached, in loose boulders and masses, and scattered along the foot of the ridge, which, contrary to my expectations, was mostly covered with heavy timber. We soon came to one of the quarries where a miner was at work throwing into piles the iron rocks. The soil and timber are removed from the iron several hundred feet along the ridge. This opening into the iron is several hundred fet below the sumit of the ridge, and about one hundred feet above the level ground. It presents a wall of iron ore, broken and seemed very irregular, the most regular fractures being perpendicular.—Out of the side of this ledge, masses of every size, from a pound to many tons in weight, are thrown down by means of a crowbar or by blasting, and the pieces are broken up with a sledge-hammer, so as to be conveniently handled.

As it comes out of the quarry, it is bright and beautiful, breaking like cast iron,and seems quite as pure and more compact. A ton of bloom iron is easily made out of one and a half tons of the ore. For from twelve-and-a-half to twenty-five cents per ton it can be broken up ready for the furnace.

Thus much as to the quality—now,as to the quantity. Above and below, for at least four hundred feet, the same description of ore shows itself, and how much further it extends down below the surface, it will be useless to inquire, till the world has been supplied for a few hundred years from what is seen around and above. To satisfy myself as to the extent, I rode around to the west side of the ridge, which is more precipitous than the other, and at every step saw fragments of the iron which had broken off, scattered along the side, which had crumbled off for ages, and for ages longer it will continue to crumble and decay before it can be removed by the hand of man. The ground over which we rode for some distance, and on which large forest trees were thickly growing, as was evident from the large masses of the ore here and there exposed, rested on a foundation of this iron. Its length, like its depth, cannot be estimated, though it is seen in every direction for half-a-mile along the ridge.

This is known as the Jackson Company's Location. To the west of this ridge, are others of a similar description, both as to quality and extent ; but I had no desire to look further, nor as to this matter, need iron manufacturers, for they can build their railroads and plank roads, and back up their carts and cars to the mountain for centuries to come, without the remotest fear that the iron will be exhausted. [Lake Superior Jour.

Remember this, Boys.

Will the young men whose evenings are now spent on store boxes and other places of idle resort, or in idleness even at home, read and reflect upon the following :

"I learned grammer," said William Cobbett, who became an eminent printer and writer, "When I was a private soldier on sixpence a day. The edge of my guard bed was my seat to study in, my knapsack was my book-case, and a board lying on my lap was my desk.—I had no money to buy candles or oil ; in winter it was rarely that I could get any light but that of the fire, and only my turn even at that. To buy a pen or sheet of paper I was compelled to forego a portion of food, though in a state of starvation. I had no moment at that time that I could call my own, and I had to read and write amid talking, singing, whistling and bawling of at least half a score of the most thoughtless men, and that too, in hours of freedoom from control. And I say, if I, under circumstances like these, could encounter and overcome the task, can there be in the whole world, a youth who can find excuse for non-performance ?"

The greatest men have been trained up to "work with their hands." If there is an encouraging sentence in the English language, it is the above. God ordained that man should live by "the sweat of his face," and intelligence can breathe and live only in a being of an active life. Aikenside, the author of "The Pleasures of Imagination," was a butcher until twenty-one, and first took to study from being confined in his room by the fall of a cleaver. Marshal Ney was the son of a cooper ; Roger Sherman, Allen Cunningham, and Gifford were shoemakers ; Sir William Herschell was a fifer boy ; Franklin, a printer's devil; Ferguson, a shepherd ; James Monroe, the son of a bricklayer ; General Knox was the son of a bookbinder ; General Green, a blacksmith ; General Morgan, a wagoner ; Burns, a plow-boy; Bloomfield was a farmer; Frazier, a stone-cutter, Crabb and Keats,apothecaries; Sir Wm. Blackstone was the son of a silk mercer, and a posthumous child.

NOVEL ENTERTAINMENT.—The Jockey Club in Paris have been amusing themselves with a contest between two owls and twelve rats on the floor of a drawing-room. Eleven of the rats and one of the owls were killed, and the surviving rat and owl put *hors de combat.*—The stakes are to be given to the owner of the combatant that shall live the longeit.

Humming Birds.

Stern, bigoted, and cruel were those fierce rapacious men, the Spanish conquerors of Mexico ; men cast in an iron mould, which rendered them insensible to all ordinary emotions. It is however recorded of Cortez and his companions that, as on their route to Cempolla, they marched through a wilderness of noble trees, from whose branches the most beautiful blossoms were suspended, and trod under foot wild roses, honeysuckles and sweet smelling herbs—expressions of admiration escaped them —and when, in addition to these charms of vegetation, clouds of glorious butterflies arose, and birds of gorgeous plumage filled the air with delicious melody, the apathy of these warriors was completely overcome, and they involuntarily burst forth in exclamations of delight, terming the country a terrestial paradise, and fondly comparing it to the fairest regions of their own sunny land.

First in beauty among these birds which struck them with admiration, were the *tomoneioes* or humming birds, which as old Herrarra says, they doubted whether they were bees or butterflies ; and civilized man has since vied with the Indian in inviting expressions of admiration of these objects. But here, as on other occasions, the child of nature has proved the best poet, and no term has been invented more expressive than their Indian name, Guorocigaba, which signifies the *beams* or *locks of the sun.* Before this, the *cheveux de l' astre de jour* of Buffon is a tame comparison.

It is an interesting fact, that, as a general rule, birds of a most brilliant plumage are found in those parts of the world where the sun shines brightest, the flowers are the loveliest, and where gems and precious metals abound, as if nature had bountifully brought together the objects most attractive to man.—The rubies and emeralds of the earth are, however, cast into the shade by the living gems which float in the air above them.

The humming bird tribe is nearly confined to the tropical portions of the new world ; the southern continent as far as the tropic of Capricorn, and the great archipelago of islands between Florida and the mouth of the Orinoco, literally swarm with them. A high temperature is, however, by no means essential to their existence, as the most beautiful species are found at an elevation of seven to twelve thousand feet above the level of the sea, and one of remarkable brilliancy inhabits Chimborazo, at the height of fifteen thousand feet.—Other species live in the dreary climate of Terra del Fuego; and Captain King saw many of these birds flitting about with perfect satisfaction during a heavy snow storm near the straits of Magellan. In the humid island of Chileo the humming birds darting between the dripping branches agreeably enliven the scene—and Juan Fernandez, sacred to early associations, has two species peculiar to itself. Captain Woods Rogers, who visited this island in 1708 and took Alexander Selkirk from it, says—"And here are also humming birds about as big as bees, their bill about the bigness of a pin ; their legs proportionable to their body—their feathers mighty small, but of most beautiful colors. They are seldom taken or seen but in the evening, when they fly about, and sometimes, when dark, into the fire."

It is from the noise produced by the vibrations of its wings that the humming bird derives its name ; for rapidity of flight it is quite without an equal, and to this end the shape and structure of its body beautifully tend.—In no birds are the pectoral muscles—the chief agents in flight—so largely developed, and in none are the wings and the individual feathers so wonderfully adapted for rapid locomotion ; the tail, though presenting every conceivable modification of form, is always made available as a powerful rudder, aiding and directing the flight ; the feet, too, are singularly and disproportionately small, so that they are no obstruction to its progress through the air. Several species have their feet enveloped in most beautiful fringes of down, as if each were passed through a little muff, either white, red, or black.

The eggs of the humming bird are two in number, white, and of an oblong form ; but the nests in which they are contained are almost as marvelous as the birds themselves.—What will be said of a nest made of thistle down? and yet one is to be seen in Mr. Gould's collection. The finest down, the most delicate bark, the softest fungi, the warmest moss—all are made available by the different species of these lovely birds and no less various are the localities in which the diminutive nests are placed. A tiny object is seen weighing down the streaming leaf of a bamboo overhanging a brook ; it is one of these nestlets attached to the point of the fragile support, and waving with it in the breeze. Another tribe prefers the feathery leaves of the fern, while the tip of the graceful palm-leaf is the favorite bower of a third species ; but in every instance, the spot is admirably selected to preclude marauding serpents or monkeys, from destroying the eggs or callow young.

The down of the cotton-tree, banded round with threads of spider's webs, forms the fairy

abode of the mango humming-bird. This silky filamentous down is borne upon the air, and though so impalpable as to be inhaled by man in the breath he inspires, it is diligently collected by these little creatures. They may be seen, suspended in the air, battling with a puff of down, which, sailing with the gentle breeze, coquettishly eludes the stroke of the eager beak; filament after filament is however secured, and borne in triumph to complete the elfin.

"There builds her nest, the humming-bird,
Within the ancient wood,
Her nest of silky cotton-down,
And rears her tiny brood."

[Bentley's Miscellany.

A Cow with her First Calf.—Mr. Russel Woodward, in the memoirs of the N. Y. board of agriculture, says: "I have found that young cows the first year that they give milk may be made, with careful milking and good keeping, to give milk most any length of time required. But if they are left to dry up early in the fall, they will be sure to dry up their milk each succeeding year if they have a calf near that season of the year; and nothing but extraordinary keeping will prevent it, and that but for a short time. I have had them dried up all their milk in August, and could not by any means make them give milk much beyond that time in any succeeding year.

I have two cows now that were milked the first year that they had calves till near the time of their calving again, and continued to give milk as late as that ever since, if we milk them."

We have seen the efficacy of the above plan verified. [American Far.

Water for Cattle.—We last month noted the fact that a farmer in this county was in the habit of fattening cattle without permitting them to drink water. In confirmation, Isaac Gause, of this vicinity, informs us that he tried the experiment a few years ago, on the recommendation of an experienced cattle drover, and that for six or eight weeks he omitted driving his cattle to water, and that they fattened full as well under this regimen as they did when watered freely. We are also informed by a butcher of this place, that he has killed quite a number of cattle fattened in this way, and has uniformly found the tallow more firm and solid than those fattened where they had access to water.

[Indiana Farmer.

Every man is rich or poor, according to the proportion between his desire and his enjoymts.

EDITOR'S TABLE.

Our New Volume.

We have the pleasure of presenting the first number of the Farmer for vol. 4., 1852, in an entire new dress, and considerably enlarged, by adding both to the length and width of its pages. We have also introduced a larger number of illustrations than any former number contains, and which will still be increased in future numbers. We shall spare no efforts within our means, to make the current volume equal in every respect to the best Agricultural Journals of the country. In our feeble efforts thus far, to make our Journal acceptable to its readers, and to advance the cause of Agriculture, we have been cheered onward by the generous efforts of the friends of the cause, under many and trying discouragements. To the press, within the range of our Journal, we are largely indebted for its approving voice, and we would extend our thanks for the many and flattering notices we have received. In view of the past, we think we shall not be disappointed in the belief, that our increased efforts for enlarging and otherwise improving the Farmer, will be met by a corresponding liberality, and increase of subscribers among the farmers of the Northwest.

The causes which have heretofore prevented the appearance of the Farmer, at the regular time, have been entirely removed. For the future, it shall be issued promptly, and we trust our old patrons will give us another trial.

We *had* contemplated a change of name for the Farmer, as indicated in the prospectus sent out some time ago but; through the advice of friends, we have determined to retain our first chosen, (Wisconsin & Iowa Farmer.)

P. S. See prospectus on the cover.

Seasoning Timber.—Newly cut timber placed twelve or fourteen days entirely under water, and then dried in the sun and wind, is rendered less liable to warp and crack. Partial immersion is destructive, and steaming or boiling are dangerous, for hot water or steam has, to some extent, the power of dissolving the fibres; but the proportion of an hour to an inch in thickness is the usual practice for boiling or steaming in the dockyards.

TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY FOR THE YEAR 1850.—We are again under renewed obligations to B. P. JOHNSON, Esq., the efficient and esteemed Secretary of the NEW YORK STATE AGRICULTLRAL SOCIETY for the tenth volume of its Transactions (1850.) This volume contains about 800 octavo pages—is far superior in Typography, illustrations, and agricultural knowledge to any one of the nine volumes which have preceded it. It contains a vast amount of valuable information.

We observe a new and interesting feature in this volume; that is, a "General view and agricultural survey of Seneca county" by JOHN DELAFIELD, Esq., the president of the society. The report commences with the early history of the county, in which are recorded many interesting incidents, connected with its settlement and growth. In making this survey "every town lot in the county, surveyed under the authority of the state was visited and examined. The rock formations upon which the soils are based, was traced and examined; a chemical examination of the rocks and soils was made, exhibiting the nature and amount of the several mineral elemens and matters contained in them." The whole report occupies about 250 pages of the Transactions—is illustrated with engravings of grasses, fossil remains, insects, quarries and Topographical map of the county.

THE NEW YORK FARMER.—Such is the title of a new agricultural paper about to be commenced at Rome, N. Y. It is to be published weekly and monthly. The weekly at $1 50 per year and the monthly at 50 cents, with the usual discount to clubs. L. L. Lewis & Co. publishers.

WISCONSIN AGRICULTUIRST.—Such is the title of a paper published monthly at Madison, (50 cents per year) the 1st and 2d nos. of which we have received. Each no. contains 16 octavo pages. It is devoted to agriculture and miscellany, neatly printed. Success to it, E. C. Hull, Editor.

THE BOOK TRADE.—This periodical makes its appearance monthly. The Nov. number contains some interesting statistics of the trade. The number of new publications issued during the month of October, was 237 of which 32 were from the pens of female authors. The capital employed in the publishing business in New York is far greater than is generally supposed. The Messrs. Appletons employ about $400,000, and publish annually about 600,000 volumes. The Harpers employ a much larger sum still.

POPULATION OF TURKEY.—The aggregate population, according to the general census of 1844, of Turkey in Europe, Asia and Africa, is upwards of thirty-five millions; of which 15 and a half-millions are in Europe, sixteen millions in Asia, and nearly four millions in Africa.

VENTILATION.—Whenever large numbers of people are brought together in a close apartment, the air is rapidly rendered impure, and attention to ventilation becomes necessary. This is particularly the case in schools, and the attention of teachers cannot be too often called to the matter. Commencing the session with pure air, the gradual deterioration of the atmosphere is apt to pass unnoticed by teachers and scholars, though the air would be very offensive to one coming in from the pure air of the street. This is an every day matter. Where there are no flues for ventilation—as in every well constructed school house there must be—the window sash should never be entirely closed. A very small aperture at the top of the window will ventilate the room. If the room becomes too cool, let it be warmed by fire, and not by the animal heat of the children. Health is more valuable than oak wood.

TOBACCO RAISING IN WISCONSIN.—We are informed that our friend, Captain Hawley of Milford, has this year several acres of the 'weed' under cultivation. We have noticed several small patches in this and Dodge counties, of different degress of perfection, and we think it might be cultivated to profit by our farmers who have land adapted to its growth. The valleys and rich lands in Massachusetts are found to produce tobacco to perfection, and much of the article in the shape of segars is consumed by our citizens which never was south of Mason and Dixon's line. We have seen hundreds of acres in the central part of Ohio, devoted to the growth of tobacco. No one will deny the fact that tobacco is used to a large extent in our state, and if our farmers can raise an article which can be manufactured and consumed among us they should be informed of the fact. [Watertown Register.

THE GROWTH OF TOBACCO IN NEW YORK.—The N. Y. Times says: Mr S. Stewart, of Suffolk co., Long Island, has raised this season quite a quantity of tobacco. It is all of good size, some of which is full seven feet high and seven inches in circumferance at the cutting off place. Last year Mr. S. raised 2,130 pounds of leaf tobacco from a measured acre of ground. This looks well for Long Island.

AMERICAN WINE.—A correspondent of the Newark daily Advertiser writes from Cincinnatti:

"The quantity of wine manufactured in this vicinity surprises me. I have just returned from a visit to one of N. Longworth's wine cellars, where I saw 75000 bottles of sparkling Catawba, and about 40,000 gallons of wine in casks, varying from 40 to 50 gallons in each. The cellar is 120 feet long, 40 feet wide and 40 feet deep, and it is the intention of the owner to increase it to double this size during the coming spring. Besides Mr. Longworth, there are many other persons in Cincinnati and the neighborhood engaged in the cultivation of the grape, and it is supposed that not less than 1000 acres are de-

voted to this purpose. The Catawba grape is I believe, much preferred to any other variety for wine, and invariably ripens better than the Isabella in this climate."

We had recently the pleasure of tasting some of Longworth's Catawba, at the house of a friend in Detroit, and too much praise cannot be awarded, as it does not intoxicate, while its flavor is delicious. No foreign champaigne will compare with it,

[Wisconsin.

BUSINESS OF THE GENERAL POST OFFICE.—From the post master general's report, just submitted to congress we make the following abstract which shows in some measure the magnitude of the business of this department of the United States government. The report would not seem to warrant any farther reduction in the rates of letter postage, at present:

Number of mail routs.....	6170
Length of mail routes.. .....miles	196,290
Number of contractors employed.....	5544
Annual transportation of mails 53,272,252	
Annual cost of transportation $3,421,754	
Miles of railroad transportation.....	8,568,707
Miles of steamboat transportation.....	6,454 982
Number of postmasters appointed.....	5339
Number of post offices, June 1, 1851...	19,796
Gross receipts of the department $6,786,493	
Total letter postage	5,369,243
Newspapers, Pamphlet, &c., postage..	1,035,131
Ordinary revenues of the year	6,551 978
Increase over those of last year..... ...	929,006
Expenditures of the year	6,278,402
Ordinary expenditures	6,024,567

MINING IN GRANT COUNTY, WISCONSIN.—The Platteville Independent American states that a fine *Lode* has been recently discovered in the vicinity of that village. $100,000 worth of ore has already been taken out and five times that amount is anticipated. A Mr. Snowden is the lucky owner.

TERRITORIAL ROAD SURVEYS.—The corps of the U. S. Topographical engineers have completed the surveys of the road in this territory, from Point Douglass to the Falls of St. Louis at the head of Lake Superior, 137 miles; and another from Point Douglass to Fort Ripley, 150 miles, and one from Swan river to Long prairie, 27 miles. A road has already been surveyed from Mendota to Wabashaw; and another to be surveyed from Mendota to the mouth of the Big Sioux on the Missouri; distance about 250 miles. [Minnesota Dem.

URINE.—Save this valuable manure—in every hundred pounds there is 72 per cent. of nitrogen in its wet state, 23.11 when dry.

☞ A cement composed of 4 parts of pure chalk, and 6½ parts of fresh alluvial clay will be found cheaper than any other as an hydraulic mortar.

Wooden posts or stakes driven under salt vats, owing to the preserving quality of the salt, are practically indestructible. It would be very easy to adapt this hint to the preservation of fence, garden posts, &c, as they do in Syracuse.

☞ We find in the Granite Farmer the following description of several animal curiosities, exhibited at the recent N. H. State Fair:

There was one singular looking animal, said to be a S. Amer sheep, having four horns, and wool more than a foot in length, which it was said, had not been sheared for seven or eight years. It seemed very unwieldly and hardly able to move under its load of cloth. While speaking of curiosities we would call to mind a Devon heifer, exhibited by Isaac Fox, of Nashville, in the top of whose fore shoulders was a singular growth closely resembling the two fore legs of a miniature cow. The animal's horns turned down in front, and it was very prettily ornamented, so that it attracted much attention.

SUBSTITUTE FOR POTAOES—*Try it*—An agricultural paper suggests a substitute for potatoes and rice, which it would be well for housekeepers in these times to try. Potatoes are high and wheat low, and should the suggestion be a practicable one, there would be much economy in following it:

[Wool Grower.

Take good clean wheat, one quart or two, according to the size of the family, wash it and soak it over night in cold water—then boil it from two to three hours, according to the age of the wheat, in just as little water as will be necessary to cook it and have it all evaporate. Take this boiled wheat on your table and eat it with any thing you are accustomed to eat with potatoes, and it will answer as a good substitute.

You may eat it also with anything that you eat with bread, and it will be better than rice. When it is understood that a bushel of wheat can be bo't for less than half what a bushel of potatoes costs, and will go six times as far, the difference in cost will be clearly seen.

UNIFORMITY IN BREEDING.—A *family* of cattle exhibited by W. W. Wadsworth, Esq., of Geneseo, at the late state fair, deserves special mention. It consisted of a cow nine years old, and five of her offspring, viz: one cow, six years old; one ox, five: one cow, four; one heifer, three; and a suckling calf. We were told that there was another heifer, in the same family, fully equal to any of these, in good qualities. The parent cow and most of her progeny are red. She is, perhaps, seven eights short-horn, and has been bred to short-horn bulls. Her points and handling are excellent—scarcely surpassed by any, and equalled by very few of the short-horn cows on the ground; and the same qualities are very strikingly apparent in all her progeny. The ox, (which belonged to a pair exhibited by Mr. W.,) was one of the most complete animals, in every particular, that we have ever seen. The whole family form such an example of *uniformity* in breeding, as is seldom attained.

[Cultivator.

MONSTER BEANS.—We have twice lately noticed the extraordinary growth of some specimens which have been shown us of the Rocky Mountain bean, recently introduced into this country. We believe, if we recollect aright, the former specimens measure respectively 24½ and 22 inches; but yesterday we were informed by Mr. John Warcup, gordner, of Laprairie, that he has a bean growing in his garden 27 inches in length. He says that the Rocky Mountain bean is an excellent and very suculent vegetable, fully equal in flavor to the common scarlet runner of this country.

[Montreal Transcript.

MODEL FARM.—We are much gratified to see by the Quebec papers, that the gentlemen of the seminary in that city have determined upon establishing a model farm, on the property at the Cote Saint Paul. We trust we shall not be thought officious if we solicit the attention of our friends, the gentlemen of the Montreal Seminary, to the patriotic and enlightened conduct, in this matter, of their brethren in Quebec. [Mont. Herald.

IT MAY BE USEFUL PRESENTLY.—To render boots and shoes waterproof.—Mix carefully over a slow fire a pint of drying oil, two ounces of yellow wax, and half an ounce of Burgundy pitch. Lay the mixture while hot, on the boots or shoes with a sponge or bit of flannel, and when dry lay it on again; repeat the operation until the leather becomes saturated. Let them be put away and not worn until they become perfectly elastic, when they will be found not only impervious to water, but soft, pliable and more durable.

A GERMAN PROFESSORSHIP TO AN AMERICAN.—Dr. B. A. Gould, Jr. of Boston, has been invited to the professorship of astronomy at the university of Gottingen in place of the late Dr. Goldsmedt deceased.

LEAD TTADE.—The Galena Advertiser obtains through the assistant marshal for Lafayette county, the following statistics of the lead business of that county for the year 1851 :

Whole amount of mineral smelted, 11,000,000 lbs.

Bushels coal consumed	25,000
Cords Wood	629
Whole amount slag	400,000
Whole amount leaf produced	7,835,000
Valued at	$396,400

THE BIBLE IN BELGIUM.—In 1835 there were no home missionary society in Belgium. There are now twenty-six missionary stations and twelve ordained ministers, and within fifteen years, 300,000 copies of the bible have been distributed.

CURRYING COWS.—Dr. B. Rush, in a lecture upon the advantages of studying the diseases of animals, states that there is an improvement in the quality of the milk, and an increase in the quantity, which are obtained by currying the cow.

SUGAR FROM INDIAN CORN.—A patent has been taken out for making sugar from Indian corn by the following process :

A quantity of corn meal is placed in a boiler to which is added nearly an equal quantity, by measure, of water, together with a small proportion of common oil of vitriol, or sulphuric acid. The mixture is then boiled at a very high temperature, when common brown sugar is produced, held in solution of course, with the acid. A quantity of common chalk is now thrown in which has the effect to remove the vitriol from the sugar, the vitrol uniting to the chalk, and falling with it as sediment, to the bottom of the boiler. The liquid sugar is then drained off into another vessel, boiled down to molasses, and finally crystalized and clarified in the usual manner.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., FEBRUARY, 1852. NO. 2.

PUBLISHED ON THE FIRST OF EACH MONTH, BY
MARK MILLER,

TERMS:

50 Cents a Year in Advance;

Five copies for $2, if directed to one Post Office. and at the same rate for a larger number. All subscriptions to commence with the volume. Back numbers supplied to new subscribers.

ADVERTISING;

One page per year	$50
Half page " "	30
Quarter page	18
Eighth page	10
One square, (twelve lines or less,) 1 year	6 50
(Less than one year,) for first insertion	2 50
For each subsequent insertion	75

OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

State Agricultural Society.

In accordance with the constitution, the WISCONSIN STATE AGRICULTURAL SOCIETY held its first annual meeting at Madison, in the senate chamber on the evening of January 21st. The meeting was large, and what was still more gratifying to us—that lively interest manifested in the proceedings by every one present.

The President, Erastus W. Drury, being absent, the meeting was organized by Vice President Henry M. Billings, from the first congressional district.

After the reports of the Secretary, Treasurer and executive committee were presented and accepted, the society proceeded to the selection of officers, for the present year, with the following result:

President,

Henry M. Billings, of Iowa.

Vice Presidents,

N. B. Clapp, of Kenosha, 1st Con. Dist.
Orin Dinsmore, of Rock, 2d " "
Tho's. R. Mott, of Jefferson, 3d " "
A. C. Ingham, of Dane, Cor. & Recor. Sec.
Simeon Mills, of Dane, Treasurer.

Executive Committee,

Warren Chase, of Fond du Lac,
E. B. Dean, Jr., of Dane,
S. S. Daggett, of Milwaukee,
Jacob D. Merritt, of Grant,
H. B. Hawley, of Jefferson.

MEETING OF THE EXECUTIVE COMMITTEE.

Madison, Jan. 22, 1852.

Present, Hon. Henry M. Billings, President; Albert C. Ingham, Cor. and Rec. Secretary; Simeon Mills, Treasurer; and Messrs. Chase and Dean, of the additional members.

After the organization of the committee, it was

Resolved, That the secretary be instructed to correspond with the citizens of such places as desire the location of the next fair, and report to this committee on the 14th February, such propositions as he may receive.

Resolved, That $800 be appropriated for premiums at the next annual fair, and that one fourth of the premiums consist in agricultural, horticultural and mechanical books of approved merit.

Resolved, That the legislature be memorialized for the passage of a law extending the aid of the state to this society.

Resolved, That James Duane Doty, be selected to deliver the address at the next fair, and that Michael Frank be his alternate.

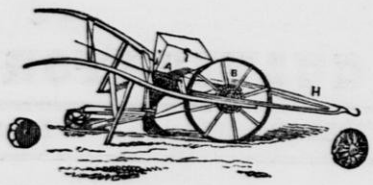
Resolved, That the seats of all the officers elected, who do not accept their appointment, and become members of the society previous to April 1st, next, be declared vacant, and that others be appointed to fill their place.

Resolved, That Messrs. Ingham, of Dane, Pinckney, of Fond du Lac; Johnson, of Kenosha; Tiffany, of Milwaukee; and Baxter, of Sauk, be appointed delegates from this society to attend the next annual fairs of N. Y., Ohio, and Michigan, and that they report to this society.

Resolved, That the secretary, treasurer, and Mr. Dean of the additional members of the executive committee, be appointed a committee to draft a premium list for the next fair, and report to the committee at its next meeting.

Resolved, That the legislature be memorialized for the establishment of an agricultural department in the state university.

After the transaction of considerable other business the committee adjourned to February 14, next.



Emery's Seed Sower and Corn-Planter.

This seed-sower is adapted to hand or horse power ; and the sowing apparatus can be so arranged as to adapt it to the sowing of large or small seeds. It drops the seed at any desireable distance, and the changes are made with the greatest ease and expedition. As the gearing is of cast iron, it is regular, uniform, and durable. Seeds may be dropped in hills, or strewed along in a drill.

The first premium of the N. Y. State Agricultural Society, of the Mass. Charitable Mechanics' Association, and of the American Institute, have been awarded to this sower ; also the first premiums of several county societies.

As the seed–sower is in use at the most busy season, it is of great value in point of economy, not only making a saving of labor by despatch, but aiding the farmer, in urgent cases, to do his work at the proper time, which is a very important matter. Besides the saveing of labor and despatch which this simple implement aids in accomplishing, it drops the seeds more uniformly than it can be done by hand, thereby saving seed, and giving a better chance for a good crop.

The great objection to root crops is the expense of cultivation ; yet so much labor is saved by sowing with a machine, that this process is a mere trifle.

For the Wisconsin & Iowa Farmer.

Barley Raising.

Editor Farmer—I have heard the question often asked since the last harvest, " what is the cause which has raised the price of barley, and increased the demand ; and will present prices be sustained until another harvest? Now, I suppose it may be mainly if not wholly attributed to two causes only ; a greatly increased consumption of malt and a falling off in the cultivation of barley in the eastern states. The amount raised there has not kept pace with the increased demand. In York State on lands which will turn off from 25 to 30 bushels of first quality winter wheat to the acre without a failure oftener than once in five or ten years, the farmers find it poor economy to grow barley, at prices even considerably above the present market price. In many of the eastern counties of York State, a change of crops has taken place within a year or two. The cultivation of winter wheat there, which had for some years been almost entirely abandoned on account of the depredations of the weavle, has been gone into again, and for the last year or two, I am told the wheat crop has been as good as in former days, or any other part of the state. Hence, the cultivation of barley in those counties which were the principal barley raising counties in the state for some years, has decreased, causing a demand on the west to supply the deficiency.

St. Louis has now become an important market for barley; almost if not quite equal to the Albany market. Wisconsin, from her favorable position, can avail herself of either of these great markets for barley. That her soil and climate are well adapted to its growth, has been fully demonstrated by the large yield per acre of many fields the past season. I have known from 40 to 50 bushels per acre to have been taken from some fields. These same fields will produce the same amount for years in succession without the use of any kind of fertilizer ; but I would not recommend such high handed robbery.

I believe barley is a sure crop, and is not liable to be destroyed, either by insects or blight ; is as easy to put into the ground and harvest as oats. I consider the raising of barley, even at a lower price than it brings at present altogether a better business than wheat ; and a great deal safer business for the farmer, than giving up every thing and diving into raising tobacco and flax ; so much talked about of late. They may pay well; but I look upon them with some doubts. I well recollect the *morus multicaulus* humbug, when every body was going to get rich at raising, and be clothed in silk. I see you are slow to recommend the many new things coming up, to the farmers, before they have been well tested by experiments. This is a wise and judicious course on your part ; for there are but few of us able to loose our labor. I am as much in favor of improvement in every

thing pertaining to my business as any man; but let uncertainties be approached cautiously. As you say—"try it on a small scale first."

Barley is used almost entirely for brewing purposes; and but few are aware of the extent of this business and its rapid increase. I can recollect the time when a glass of beer or ale could scarcely be found in any country town; but now this beverage may be obtained in any public house or grocery almost throughout the country.

The following item of statistics which I cut from a newspaper, will give some idea of the extent of the beer business and the demand for barley:

ALBANY BEER.—The seven breweries of Messrs. Taylor, Burt, McKnight, Boyd, Quin, Eggleston and Kirk, made last year 147,437 barrels of ale.

The quantity of malt made last year at these establishments, and at the numerous other malting houses, reached in round numbers, 854,000 bushels—which is about one-half the entire crop of barley raised in the state. This of course is not all used here, but supplies breweries elsewhere. [Argus.

J. B. S.

Beloit, Dec., 27, 1851.

Linen from Unrotted Flax—Errors Corrected.

Some errors seem to prevail on the subject of flax which ought to be corrected. It is quite natural for those who have always done their work in one certain manner to think no other will answer, and especially when new modes of doing the same thing have been often attempted and as often failed.

The first error I would notice is, that flax cannot be used for making linen where the seed has ripened—that flax for linen must be taken up before the seed is matured. This was formerly the opinion in Ireland, but when it was found that the Belgians saved their seed and at the same time, produced better flax than the Irish, the course was changed, and for several years, the Irish flax-growers have adopted the recommendations of the "Royal Society for the Promotion of the Growth of Flax in Ireland," and saved their seed, which frequently amounts in value to twenty dollars per acre.

Another error is, that flax must be rotted or steeped. This is necessary when only mechanical means are relied upon to prepare it for spinning, as by the present mode of manufacture adopted in Ireland, and to some small extent in this country. The steeping or water rotting process takes out a portion of the glutten, which, in the unrotten flax, connects the fibres together, making them too harsh and wiry for fine spinning. But, by the new mode previously described in your paper, which I adopt, rotting is entirely unnecessary, and indeed, injures, as all rotting more or less injures the fibre. By a little over-rotting, to which it is always liable, it is much weakened in strength or entirely spoiled.

The linen made by the new process will have the advantage of having not only all the strength of the fibre, but being in strength entirely uniform.

Another error is, that the process of refining the fibre before spinning, by the use of chemical means, or such solvents as are necessary to take all this glutinous or incrusting matter from the fibre, takes out the essential oil, which is said to be necessary to the spinning. Now there is no essential oil in flax, besides, experience has shown that it can be spun as well when so refined as the rotted flax. Besides if there were any such oil or other analogous material, it cannot be of any value to the linen, for by the universal practice of boiling the yarns in alkali before offering them in the market, and by the subsequent severe process of bleaching, all such materials are entirely removed from the fibre.

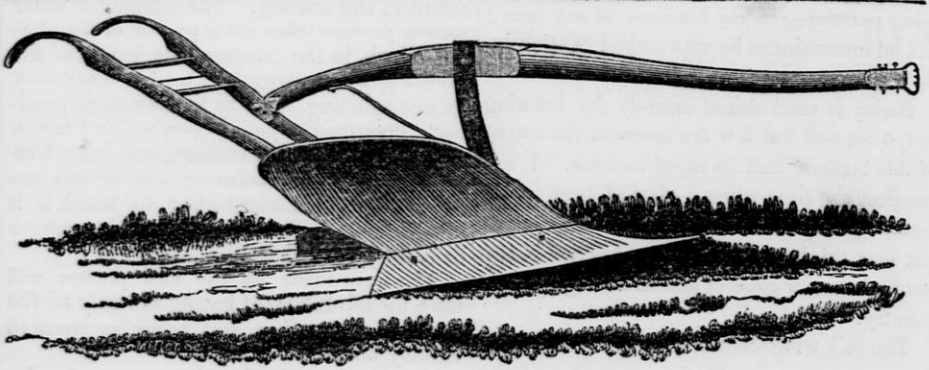
Another error is that flax for linen must be pulled, and the American mode of cutting flax when grown for seed, renders it unfit. Thirty years ago it was the practice to pull hemp, but it is found much better as well as more convenient to cut it, and if any one will carefully examine the flax plant, he will see that it would be better cut, and if well done, close to the ground, it will result in no great loss of lint, and especially by the new process, can be much more conveniently managed than if pulled, since the root contains very little fibre, and is seen to be broken off and wasted in the process of breaking.

The correction of these errors will do much to prepare the way for the introduction of linen manufactures into the country especially as cotton factories can easily be altered for linen, and it is now rendered certain that linen may be produced as cheap as cotten goods, when cotton is not below 7c, per lb.

O. S. LEAVITT.

[Mr. Leavitt has devoted a great number of years to this subject, and has visited Europe to obtain all the information that could be acquired there. We have seen some of his samples, and beautiful they are. We hope that our manufacturers will give the subject their candid and serious attention.]

[Scientific American.



Improved Steel Plow.

The above engraving is designed to represent the steel plow from the factory of Mr. May, of this place, exhibited at the fair of the State Agricultural society in Oct., last.

The first peculiar feature that presents itself, is the novel method of fastening the plow post to the beam. Instead of cutting a mortice through the beam, (consequently weakening it,) as in the usual mode of wooding the plows in common use, the post passes up the side of the beam, then forms a right angle and extends across or partly across the top of the beam, and is fastened by a single bolt.

In adjusting the draft of the plow this gives an important advantage, while at the same time the entire strength of the beam is retained, and the labor of wooding the plow much lessened.

But one of the most important considerations, is, that the clogging of the plow by straw and weeds, is, by this plan, almost wholly overcome. As the straw, &c., rise with the furrow, and gradually work up the post, it finds no resistance by the right corner of the beam as in the old style of wooding—the post here being at the *right side* of the beam instead of the *center*, the straw and stubble pass off with, and is buried by the furrow.

The front part of these plows are made of double thickness of steel, giving about twice the service of plows made in the usual way. It is well understood by the farmer that the point and front part of the common plow, is usually worn out by the time the other parts of his plow are half worn, thereby requiring heavy expenses for repairs.

The form of the mold-board and share is described as a segment of a cone, of a given diameter and height, which it is claimed gives it the easiest draft for the team in plowing—wears the most uniformly—and most perfectly covers straw and rubbish, leaving the ground in a most excellent state for subsequent cultivation.

At the late fair, the first premium of the state society was awarded to this plow; and the committee having in charge the plowing match, reported one team as having plowed "one fourth of an acre in twenty-six minutes."

The perfection to which this plow is bro't is the result of a series of experiments for a number of years past, and the agriculturists of this section of country may congratulate themselves, on having manufactured, in their midst, the most perfect plow, we think, in use.

That a good *plow factory* in every county, that has a large population, (and one for several counties if the population is small,) would in this country, that is pre-eminently an agricultural one, be an important consideration to farmers, as well as profitable to the manufacturers, might be shown by many good reasons; as, keeping the monies at home, that are now paid abroad, for this indispensable implement—exchanging farm produce for them so far as to meet the wants of the manufacturers—convenience to the factory for repairs, &c.

Profitable Crop of Potatoes. — Mr T. B. Pettit of Hempstead, N. Y., raised 63½ bushels of potatoes on one quarter of an acre, at an expense of $17, and which sold for $47,62. Netting a proffit of $30,62,

"Agricultural Bureau" or "Agricultural College"—Which Shall it be?

We say *both*, most decidedly ; though *one* agricultural editor has spoken against the former, and the New York Evening Post, and a few papers of less pretensions declare that farmers are too wise or too stupid to need either.

But, it *is* barely possible, that these self constituted manufacturers of public opinion, (who know just about as much of the wants and wishes of farmers, who happen to think for themselves, as they do of the literature of the moon,) *may be* a very little behind the times.

But we did not commence this notice for the benefit of the senior editor of the Evening Post, nor any lesser wiseacre who thinks he can feed the farmer on his electioneering pass ("soft soap,") in the year '52, as he did in the first years of this century—when good old FATHER SKINNER, and SOLOMON SOUTHWICK, with his "Plough Boy," constituted the agricultural press of this broad union.

At this day, our press has ten thousand readers, where it had not *ten*, a quarter of a century ago—and we have hundreds of associations where not one existed then, and we have learned to know our wants ; and a few of us want an Agricultural Bureau, and all of us want agricultural colleges. On the latter question there is *no* difference of opinion among genuine agriculturists, and there is but little on the former and that little grows out of the fear that a bureau at Washington must necessarily become a mere political machine, and follow the dubious destiny of parties—the prey of party politicians.

But, we believe, that there is virtue enough among our rulers to prevent this ; and at all events, there is enough among ourselves ; and power enough in our press, to render such a wrong to farmers, a somewhat dangerous proceeding for politicians. We are willing to risk it however, as soon as our national legislature can find time to attend to it. Let congres pass the law—the agriculturists will see that the law is made effective for their own benefit, even should it happen to benefit a party also, but that is no business of ours, just at the present moment.

In fact, we commenced writing, in order to congratulate the friends of a Bureau or an agricultural college at Washington, and especially our Wisconsin farmers, on the fact, that the name of Gov. DOTY is to be found, in the list of committees, ON AGRICULTURE !

We have a right, and we have reason, to hope much from the exertions of Gov. DOTY, in the committee. HE is not the man, to join the majority in again asking "to be discharged from the further consideration" of this subject, and thus throw the most heartless indignity upon three fourths of the people of the great west, and nation—No, we can *count on him*—and he knows that we shall not forget him in return. There has never been a time, in which he could win more "golden opinions" from the people of this state, and the great northwest, than at the present moment.

Crops in Minnesota.

Winter wheat has been cultivated five years with but a single failure, about Red Lake, which is about 400 miles west of north of St. Pauls, in the territory of Minnesota. This result would seem to fully establish the fact; that the soil and climate of this new Territory, embracing a portion of the most northern possessions of our Republic, is admirably adapted to the cultivation of winter wheat ; far better, than that of its more southern neighbors. Minnesota, which but a few months ago was generally regarded as the "jumping off place"—too far north to ever be made available for agricultural purposes, is likely to prove by actual experiment, equal to any other portion of the west in an agricultural point of view.

Minnesota is settled to a greater extent, than any other western state, by New Englanders. We are informed that two thirds of the population of St. Pauls, are from the state of Maine ; a class of people, of all others, who know how to open a new country, and to develope its resources.

The St. Anthony Express, published at St. Anthony Falls, in remarking upon the crops,

soil and climate of Minnesota says :

Specimens of three different kinds of corn —the common Indian Yellow Dent, the Connecticut White Flint, and the Small Eight-Row Yellow, all perfectly ripe, well filled and healthy— raised by Mr. David Gilman, in Benton County, some eighty miles north of St. Anthony Falls, have been left with us by Wm. H. Wood. Esq. A notion that our season is too short for corn to ripen properly, has obtained a wide circulation at the east thro' the agency of persons who have paid Minnesota a flying visit merely, and consequently have had no opportunity of testing the thing. But one opinion of this notion is heard from all who have given it a trial ; namely, that it *is* a notion—nothing more. If the season is shorter here, we have a soil peculiarly adapted to it—strong, vigorous, rich, quick.

But it is doubted by those who have lived here longest, if the seasons in Minnesota be *shorter* than in some portions of Illinois, Indiana, and even Ohio. The difference consists, not in length so much, but more in *kind ;* a difference, too, which is decidedly in our favor, even were we forced to cast corn into the opposite scale—an idea which a fair trial proves to be absurd. If we really have more cold weather in Minnesota, we have it at the proper time, and are not subjected to those detestable "January thaws," so general in the states mentioned, (particularly Illinois,) while the cold days left out of the winter are thrust into the spring and fall months promiscuously. Our winters are uniform, dry, clear, bracing —and the snow, once down, lays upon the ground till spring.

[From the Transactions of the N. Y. State Ag. Society.]

Wheat Culture—Experiments in Thick and Thin Sowing.

The paper presented by Mr. Adam Clark, of Yates county, contains a set of experiments on the sowing of wheat, which seems to the committee most opportune, inasmuch as the question of *thick* or *thin* sowing of grain is agitated strongly at this time, not only in this country but in England. The experiments of Mr. Clark show that wheat planted uniformly at distances of 1½ inches apart will require about 224¼ lbs. or 3 bushels 44¼ lbs. per acre. This weight of wheat consists of about 2,890,320 grains. Mr. Clark planted a portion of ground in this manner, which was harvested at the proper season and thrashed on the 22d of August and weighed on the 18th of December—estimating every ounce to contain 800 grains as weighed by him. The product of an acre similarly treated produces 63,248,000 grains, or 4,160 lbs,, which is equal to 69 bushels 10 lbs of wheat per acre.

The second experiment shows that *two bushels* of wheat or 126 lbs, sowed on an acre of ground at the uniform distance of *two* inches apart, will yield 4,580 lbs, of wheat, or 59 bushels, 40 lbs. per acre. In this experiment the number of grains sowed to an acre is about 1,616,000.

It has been usually estimated that in broad cast sowing of wheat under favorable circumstances as to weather and condition of the soil, the average deposit of seed is 48 grains per square foot: if so, an acre of broadcast requires 2,090,880 grains ; and estimating this quantity at the weight of Mr. Clark's wheat, it gives 2 bushels and 44 lbs per acre. It would have been advisable to measure and weigh the seed *before* planting, as well as after harvest, as season and cultivation may essentially vary the relative quantity and quality of the seed and product. We would have been pleased to know also whether every seed planted, arrived at maturity ; if not, what proportion was imperfect or destroyed. It is well known that a large per cenage of the wheat sown broadcast is lost to the farmer. We need therefore very exact observation, to approximate a fair estimate of comparisons. We hope Mr. Clark will continue this class of investigations ; it is important and valuable. It is not from any isolated experiment we can venture to draw a final conclusion, and on this account we would urge Mr. Clark to continue his experiments, until repeated similar results may justify a general rule.

The committee respectfully recommend that a volume of the transactions of the society be presented to Mr. Clark for the interesting communication.

J. Delafield, Chairman.

B. P. Johnson, Esq., Sec'y, &c.—It is with great pleasure that I undertake to redeem my promise to furnish the result of an experiment in raising wheat. On the 23d of September, 1848, I prepared four beds of ground to plant with wheat, on a summer fallow that had been plowed twice during the summer. The ground was prepared by finely pulverising it with a hoe and rake to the depth of eight inches. Four beds were accurately measured, each one fourth of a rod square, leaving a walk of seven inches between them ; they were numbered and subdivided as follows : No. 1, in squares 1¼ inches each way ; No. 2, about 2 inches ; No. 3, a little short of 3 inches ; No. 4, 3½ inches, includding the outside lines of each bed. Then with the thumb and finger, I carefully dropped a kernel of

wheat in the corner of each square, of No. 1 and 2, then with a stick prepared for the purpose, I placed each grain 1½ inches below the surface, and then with the head of a rake made the surface entirely smooth. On Monday 25th, I planted Nos. 3 and 4 in the same manner; they were all planted with the Soule's variety of wheat—the seed dry, without preparation. The soil is a clay loam with a slight inclination to north and north-west, and fully exposed to the winds from those directions. I used no fertilizer, except a little Gypsum; on the 17th of May while sowing on the rest of the field, I gave the bed a slight coating at the rate of from 1½ to 2 bushels per acre. Harvested July 25th, with a hand cradle, and bound it into sheaves and carried it into the barn in about two weeks. The parcels carefully shelled and kept separate.—On the 22d of August, each parcel was weighed separately by sealed scales, the result of which may be found in the annexed table. On the 17th of Dec., 4 oz. were weighed, I found that there were 800 grains in an ounce. An estimate of the amount of seed planted is made from this data, as well as the average product from each:

No. 1. Number of grains planted 4,488; weight of product in lbs. and ozs., 6 lbs. 8 oz.; amount of seed sown per acre, 3 bushels. 45 lbs.; yield per acre in bushels, 69 bu. 20 lbs.

No. 2. Number of grains planted, 2,525; weight of product in lbs. and oz., 5 lbs. 9½ ozs.; amount of seed sown per acre, 2 bus. 6 lbs.; yield per acre in bushels, 59 bus., 40 lbs.

No. 3. Number of grains planted 1,206; weight of product in lbs. and oz., 4 lbs. 12 oz.; amount of seed sown per acre, 1 bu.; yield per acre in bu., 50 bu. 40 lbs.

No. 4. Number of grains planted, 870.; weight of product in lbs. and oz.; 4 lbs. 4 oz.; amount of seed sown per acre, 43½ lbs.; yield per acre in bu., 45 bu. 20 lbs.

Average yield per acre, 56 bu. 15 lbs.

ADAM CLARK.

West Dresden, Yates co., Dec. 20, 1849.

How Cities Exhaust the Fertility of Land.

The following is an extract of a letter from Dr. Daniel Lee, to Hon. Thos. Ewbank, U. S. commissioner of patents, for 1849. Dr. Lee attributes both pestilence and famine to ignorance of the laws which govern the vegetable and animal economy. He says:

"There has been enough of the elements of bread and meat, wool and cotton drawn from the surface of the earth, sent to London and buried in the ground or washed into the Thames, to feed and clothe the entire population of the world for a century, under a wise system of agriculture and horticulture. Down to this day, great cities have ever been the worst desolators of the earth. It is for this that they have been so frequently buried many feet beneath the rubbish of their idols of brick, stone and mortar, to be exhumed in some after ages by some antiquarian Layard. Their inhabitants violated the laws of nature which govern the health of man, and secure the enduring productiveness of the soil. How few comprehend the fact that it is only the elements of bread and meat evolved during the decomposition of some vegetable or animal substance that poison the air taken into human lungs, and the water that enters the human system in daily food and drink! These generate pestilence and bring millions prematurely to their graves!

"Why should the precious atoms of potash which organized the starch in all the flour, meal and potatoes consumed in the cities of the United States in the year 1850, be lost forever to the world? Can a man create a new atom of potash, or of phosphorus, when the supply fails in the soil, as fail it must under our present system of farm economy?—Many a broad desert in Eastern Asia once gladdened the husbandman with golden harvests. While America is the only country on the globe where every human being has enough to eat, and millions are coming here for bread, how long shall we continue to impoverish ninety-nine acres in a hundred of all that we cultivate?

"Both pestilence and famine are the offspring of ignorance. Rural science is not a mere plaything for the amusement of grown up children. It is a new revolution of the wisdom and goodness of providence—a humanizing power which is destined to elevate man to immeasurable distance above his preseut condition. To achieve this result, the light of science must not be confined to colleges; it must enter and illuminate the dwellings of every farmer. and mechanic. The knowledge of the few, no matter how profound and brilliant, can never compensate for the loss incurred by neglecting to develope the intellect of the many. No government should be wanting in sympathy with the people, whether the object be the prevention of disease, the improvement of land, or the education of the masses. One per cent. of the money now annually lost by reason of popular ignorance would suffice to remove that ignorance."

HEAVY HOGS.—Mr. Joseph Spaulding of Harmony, in this county, has slaughtered two hogs which, when dressed, weighed 2000

For the Wisconsin & Iowa Farmer.

Ice Houses.

FOND DU LAC, Jan. 3, 1852.

FRIEND MILLER—I wish to inquire of you, or some of the readers of the Farmer, the best and most economical plan for building a small ice house—I mean such an one, as will come within the means of a poor farmer, I have been a constant reader of your paper, ever since its commencement, and have wondered that you have slipped over, or let pass unnoticed this subject while you have touched upon almost everything else within the range of an Agricultural paper ; and it is a matter of still greater surprise, that so little attention is paid to the preservation of ice for summer use here in the west, especially in many localities where it is difficult to procure good water, from the great expence attending the digging of wells of a sufficient depth to insure a permanent supply of water. In the warm season, water that is insipid and hardly drinkable, (or filtered cistern water,) which to me extremely unpleasant may be made palitable by the cooling influence of a chunk of ice.

But this is only one among the many advantages, which an ice house combines. Its benefits to the farmer who lives some distance from market are both numerous and invaluable. Fresh meat, milk, butter and many other articles cannot be properly preserved during some of our warm summer weather, without the use of ice. The best cellars are not quite the thing for the purpose, even if ventilated ever so well.

I say, a good ice house is of much more importance to the farmer, than to any other class of community ; and yet, they generally appreciate it the least. No man, doing anything like dairying should pretend to be without a supply of ice through the warm weather.

I have kept ice nearly through the summer months in an old log building situated in a shaded place, well covered with straw inside ; but such an apology for an ice house has but a single advantage ; merely that of preserving the ice for a time.

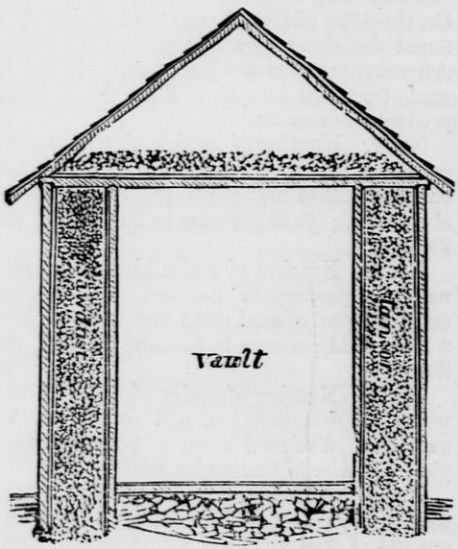
NORTHERN FARMER.

P. S. You say in your prospectus for vol. 4 "that you are now fairly planted upon your farm in the ROCK RIVER VALLEY." I am glad to hear it and hope the Farmer will hereafter visit me more regular than it has done—its irregularity being the only fault I could ever find with it. Give it to us regular, and I will risk the guarantee, that the FARMERS OF WISCONSIN will give it a bountiful support.

—

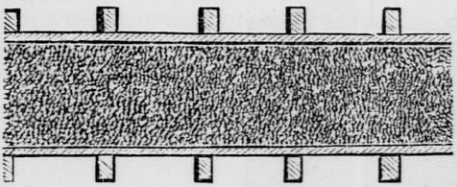
We know of no better plan of constructing an ice house than the one described below, which was furnished to the Horticulturist by N. J. Wyeth, a celebrated ice merchant of Cambridge, Mass:

"An ice-house above ground should be built upon the plan of having a double partition, with the hollow space between filled with some non-conducting substance.



In the first place, the frame of the sides should be formed of two ranges of upright *joists*, six by four inches ; the lower ends of the joists should be put into the ground *without any sill*, which is apt to let air pass thro'. These two ranges of joists should be about two feet and one-half a part at the bottom, and two feet at the top. At the top these joists should be morticed into the cross-beams which are to support the upper floor. The joists in the two ranges should be placed each opposite another. They should then be lined or faced on one side, with rough boarding, which need not be very tight. This boarding should be nailed to those edges of the joists nearest each other, so that one range of joists shall be out-

side the building, and the other i s le the ice-room or vault.



MANNER OF NAILING THE BOARDS TO THE JOISTS.

The space between these boardings, or partitions should be filled with wet tan, or sawdust, whichever is cheapest or most easily obtained. The reason for using *wet* material for filling the space is, that during winter it freezes, and until it is again thawed, little or no ice will melt at the sides of the vault.

The bottom of the ice vault should be filled about a foot deep with small blocks of wood; these are levelled and covered with wood shavings, over which a strong plank floor should be laid to receive the ice.

Upon the beams above the vault, a pretty tight floor should also be laid, and this floor should be covered several inches deep with dry tan or sawdust. The roof of the ice-house should have considerable pitch, and the space between the upper floor and the roof should be ventilated by a lattice window at each gable end, or something equivalent, to pass out the warm air which will accumulate beneath the roof. A door must be provided in the side of the vault to fill and discharge it ; but it should always be closed up higher than the ice, and when not in use should be kept closed altogether."

ANOTHER PLAN.—A correspondent of the N. E. Farmer, who says he has tried it, with entire success, gives the following mode of construction, which involves less expense to be sure, but to our mind is equally wanting in utility. Access to it would be less conveniet, nor could it be used for many purposes to so good advantage as if constructed above ground. When neither tan nor saw dust could be obtained, without nawling some distance, which is very often the case, building after this plan must be a great saving in the first outlay:

" My ice house is made by setting a frame ten feet square into the ground, and plank set up on the outside, and dirt thrown in to hold them up to the frame. The sides and top of rough boarding, the floor made of loose plank, and filled by letting a part of my surplus water run in during the coldest weather, which freezes up solid and keeps well. The plan was ridiculed at first by some of my friends, but the experiment for the last two winters has changed their opinion."

Johnsons Dictionary of Gardening says :— "Any vacant out-house which can be thoroughly drained will be an efficient ice-house. Moisture is a much more rapid solvent of ice than mere heat. If in an out-house, with faggots three feet deep be placed, and round the sides of the house a lining of stubble or straw nearly as thick, and then the ice be rammed in hard, and covered over with a similar coat of stubble, the ice may be preserved there for twelve months."

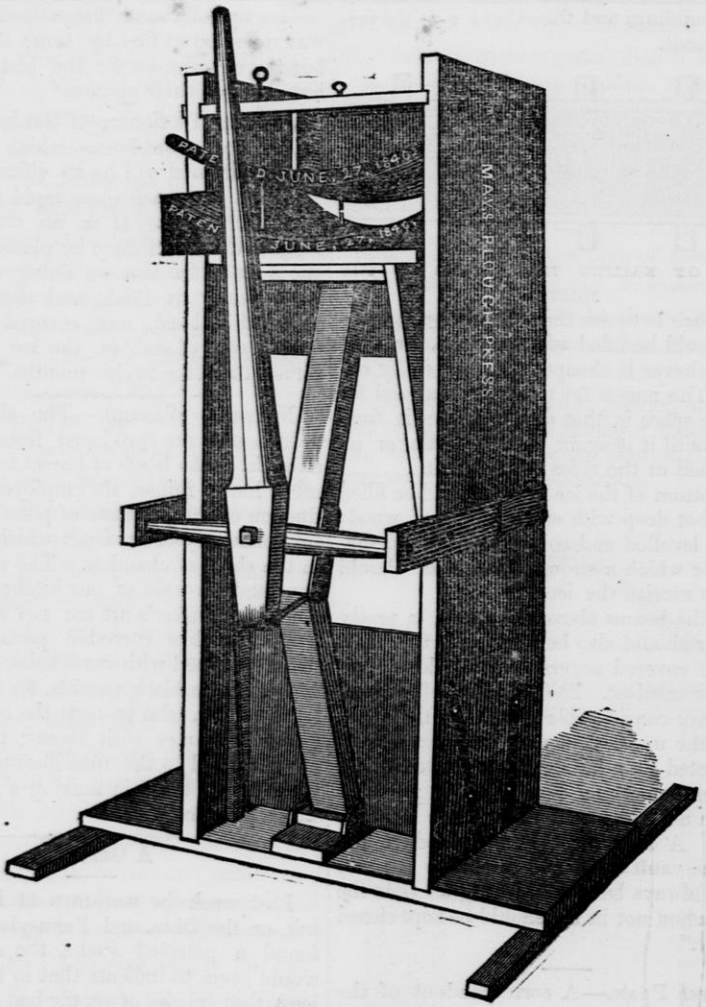
NOTHING WASTED.—The skins used by gold-beaters are produced from the offal of animals. The hoofs of horses and cattle, and other horny refuse, are employed in the production of the prussiate of potash, and beautiful yellow crysta lized salt which is exhibited in the shops of chemists. The wornout sauce pans and tin-ware of our kitchens, when beyond the thinker's art are not utterly worthless. The less corroded parts are cut into strips, punched with small holes, and varnished with a coarse black varnish, for the use of the trunk-maker, who protects the edges and angles of his boxes with them ; the remainder are conveyed to the manufacturing chemists who employ them in making a black dye for calico printers.

A Curiosity.

Last week the workmen at Power's Summit, on the Ohio, and Pennsylvania railroad found a petrified snake, the size of which would seem to indicate that in this region at least, that species of reptile had greatly degenerated. His snakeship was imbedded in the solid limestone rock, sixty feet below the earth's surface. Its size is enormous, sixteen feet in length, and in the middle at least four inches in diameter. Although its substance is completely assimilated to the rock in which it was imbedded, it still looks surprisingly natural ; indeed almost as perfect in "form and feature" as when alive. How his snakeship got so far beneath the surface, and how long he has lain there, are questions which we leave to the scientific.

[Beaver, (Pa.,) Star.

☞ Women require more sleep than men and farmers less than those engaged in almost any other occupation. Editors, authors, and artists need more sleep than those of most other professions. The same is true of precocious children.



Plow Press.

The above engraving is designed to represent the plow-making machine used in manufacturing the steel plows that received the *first premium* of the Wisconsin State Agricultural society at its annual fair in October, last.

By an inspection of the engraving it will be seen that a lever is used to operate a series of *knuckle joints*, which are brought into a line as the lever is brought to a horizontal position, (at which time the most intense pressure is given,) thus bringing the heavy matched iron dies or swedges together as near as the steel plates within them will permit.

The plates are kept in their appropriate position in the dies by means of sliding adjusting rods, and the joint at the base of the machine is supported by a wedge, so as to regulate the dies to the corresponding thickness of the steel used in the construction of the plow.

The manufacturers that use this machine in making steel plows, deem it indispensable not only for the perfection and uniformity of the work accomplished by its use, but for the facility it affords for performing work rapidly.

It occupies, moreover, but little space—is compact and not liable to get out of repair—is worked by one man, and is capable of giving *forty to one hundred tons* pressure almost instantly.

We think this machine well worthy the attention of those engaged in the manufacture of steel plows and other agricultural implements.

Agriculture.

Agriculture has made greater strides towards a perfect system within the present century, than in all the many hundred years preceding. That which was, until about fifty years ago, a simple plodding routine, at once destructive to continued fertility, and ruinous to the interests of the farmer and landowner, is now gradually becoming a dignified science, which properly understood, and faithfully carried out, will not only reward the labor of its study by the increased fruitfulness of the soil, but extend its benefits beyond the energetic agriculturist himself, and all classes of the community. It may be a slower, but it is a surer road to wealth than all the gold mines of the Pacific ; and by the stimulus which good farming necessarily creates, by the more imposing position it gives to the state from the increased value of the land within its limits, and by the active employment it affords to other trades and professions, it enables the people of the commonwealth to sustain with ease its dignity and credit, and necessary taxation.

The benefits which agriculture owes to those immortal names whose lives were devoted to its study, are vast. Through the experiments they undertook, and the discoveries they made, there is found to be no land so utterly barren but what may be converted to some degree of fruitfulness. And soils, once fertile, but now impoverished by excessive and injudicious culture, can be restored to their former vigor, and by proper management brought into a condition of permanently increasing productiveness. A careful analysis of soils—by no means difficult to acquire—and a knowledge of the constituent elements necessary to fertility, will enable any one with a little perseverance, to acquaint himself with the particular properties that are wanting in his land ; and these being supplied a suitable rotation of crops afterwards will not only keep the soil in good heart, but actually improve it still further.

[Selected.

Beautiful Extract.

The following beautiful extract we copy from an agricultural address, recently delivered before the Lewis county (N. Y.) agricultural society, by Caleb Lyon, the poet:

"Permit me," said the speaker, "to call your attention to a subject intimately connected with the comfort of your own home. I would ask in what manner, an acre of ground, in the common course of cultivation, can so well be employed as in a garden, or who deserves to have life's path strewed with fruit and flowers more than the farmer? All our vegetables were originally acclimated here ; and Homer, who composed his great poem, the Illiad, five hundred years before Cadmus brought letters into Greece, makes Laertes describe in glowing colors, the bright associations that are clustered about this truest cradle of agriculture. Here it was that Plato discussed, Eve sinned, and Jesus prayed. The Chinese have floating gardens, the Persians hanging gardens, the Arabians fountain gardens ; but ours are household gardens ; and our after-life's happiest moments may be in the memory of the flower plucked from thence to adorn a bridal, or to grace a bier.

* * * * 'Adam was a farmer while yet in paradise, and after his fall was commanded to earn his bread by the sweat of his brow.' Job, the honest, upright and patient, was a farmer, and his stern education has passed into a proverb. Socrates was a farmer, and he wedded to his calling the glory of his immortal philosophy. St. Luke was a farmer, and divides with Prometheus the honor of subjecting the ox to the use of man.—Cincinnatus was a farmer, and the noblest of them all. Burns was a farmer, and the muse found him at his plow, and filled his soul with poetry. Washington was a farmer, and retired from the highest earthly station to enjoy the quiet of rural life, and present to the world its sublimest spectacle of human greatness.—To these names may be added a host of others who sought peace and repose in the cultivation of their mother earth. The enthusiastic Lafayette, the steadfast Pickering, the scholastic Jefferson, the fiery Randolph, all found an El Dorado of consolation from life's cares and troubles in the green fields and verdant lawns that surrounded their homstead.

Instinct in a Bird.

Once when traveling in Tennessee, Wilson was struck with the manner in which the habits of the pennated grouse are adapted to its residence on the plains. One of them was kept there in a cage, having been caught alive in a trap. It was observed that the bird never drank, and seemed rather to avoid the water ; but a few drops one day falling upon the cage, and trickling down the bars, the bird drank them with great dexterity and an eagerness that showed she was suffering with thirst. The experiment was then made whether she would drink under any other circumstances, and though she lived on dry Indian corn, the cup of water in the cage was for a whole week untasted and untouched ; but the moment water was sprinkled on the bars, she drank it eagerly as before. It occurred to him at once, that in the natural haunts of the bird, the only water it could procure was from the *drops of rain or dew.*

HORTICULTURE.

Brief Horticultural Notes.

BY JOHN A. KENNICOTT, M. D.

INTRODUCTORY.—I think of giving the uninitiated readers of the Wisconsin Farmer, a few plain rules, for the cultivation of fruits and flowers; and perhaps ornamental trees and plants—accompanied by such observations and reflections on their history—their sanitary and humanizing tendencies, and the general economy of their free production and habitual use—as the occasion may chance to call forth, or I may hope to render interesting or instructive, to my reading brethren, who find their profit and their pleasure in cultivating a portion, of the not altogether ungenial soil, of the broad northwest.

And first; of CULTIVATED FRUITS: Almost every intelligent person must have observed, that there is a great difference in the qualities of different *varieties* of the same species of cultivated fruits: In truth, the *best* are as far above the ordinary natural sorts as the most cultivated MAN is above his erewhile, fancied progenitor—"the monkey" or "the frog"—and I can assure you, my friends, that this cold blooded croaker has been brought forward to deprive our caudated "original" of his old honors.

But, I must tell you that one of my good friends, and a most gentlemanly personage, and learned pomologist, will have it, that man and all the fruits of the earth were created PERFECT, in the Garden of Eden. He says, that the FRUITS suffered from the curse there spoken by the creator, and have continued to degenerate, until within a few hundred years, —since when, man, raised from his darkness by Christianity, and the scientific developements consequent thereon, *has begun to reproduce the original types*, which grew, God-planted, in paradise.

This is a beautiful and a pious thought, of my good friend—and his conclusions are not without reason—especially, when he says "we should not consider poor Adam and Eve so very fortunate, if they had nothing better than the choke pear and crab, from which it is said, ours are derived," and we have certainly *produced*, (if not reproduced,) some fruits more worthy of paradise, than their prototypes of the last century were of the gardens and orchards, of a civilized community.

It is a very easy thing to raise fruits; and the crop, of most sorts, is more certain than wheat, and will *pay* more than double the profit on wheat, during the first 15 years from planting; and *after* that, the difference, in favor of fruit trees, is too great for comparison.

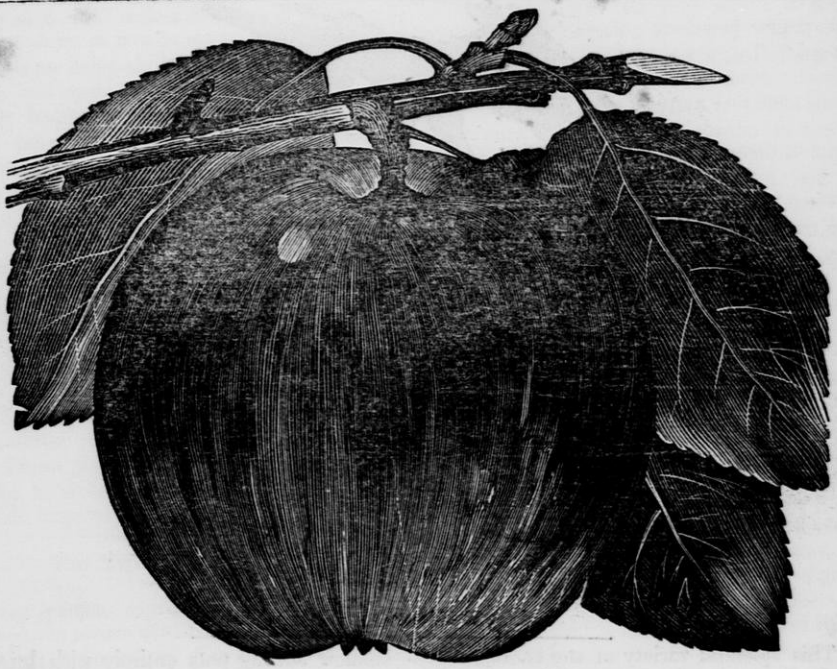
Take the range of northern fruits, and if selected with that view, from trees of proper growth in the nursery, and you will have most of them bearing good crops in five years —this is not long to wait—and even should you plant the varieties of tardier habits, *they* will give you fruit in ten years, in nearly every instance.

In my orchard (of all sorts) about one-tenth, of my first planting bore the third season—and perhaps one half had fruited by the 5th summer—and, ten years after planting, but *one* tree, out of hundreds, (a HARVARD PEAR,) has shown no signs of fruitfulness.

We have had 6 bushels of apples the 5th summer after planting the tree—perhaps only 5 years old when taken from the nursery—and certainly not more than six—and from a Vergalieu pear, (White Doyenni) *on a pear stock*, and not more than five years' growth from the bud, when planted, we had over a bushel of the most delicious fruit, the 6th autumn after, as near as I can remember—tho' it may have been the 7th season—this tree has borne, however, since the 5th year from the nursery, and has never faild to give us some fruit since it established the habit.

But this is enough for one number. In my next I may give you something more practicaal. We shall see.

THAWING FROZEN VEGETABLES.—Frozen vegetables should never be thawed by putting them into warm water or before a fire, or even into a room warm enough to thaw them. But the frost may be extracted without injury, by immersing them in cold water, at a temperature a little above that of freezing. In fact, we think the flavor of some kinds of vegetables is greatly improved, by the process of freezing and thawing as here stated. We have often ate potatoes that had been frozen and thawed, and which were greatly improved by it.



Hubbardston Nonsuch Apple.

The Hubbardston Nonsuch is one of our best late fall apples, particularly for the market, where it is very popular, bringing the highest price. Some say that this fruit has been overrated, but those who give it good culture, get large, fair crops, and sell the fruit from three to four dollars a barrel, make no such complaint. [N. E. Farmer.

The Blackberry Culture.

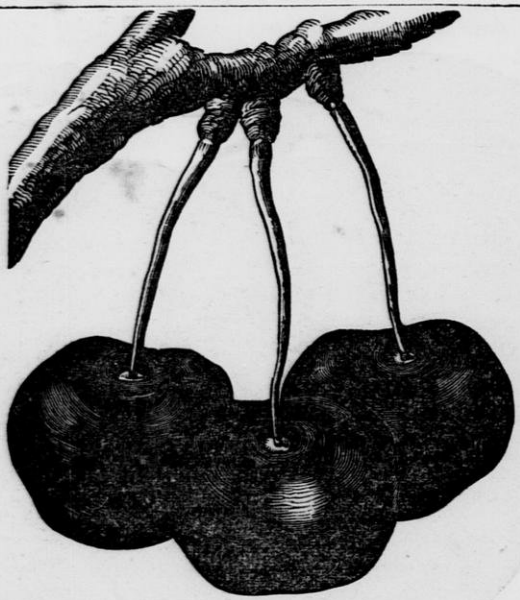
Of all the berries which our land produces, none, in their season, excel the high blackberry of the Northern States. Growing wild in our mountain passes and glens, among bush pastures, or by the high-ways, or along the fences, they produce abundantly without care or cultivation, and in certain portions of the country, they are, perhaps, the most profitable object to which the land they occupy can be devoted when a ready market exists for them. Thousands of bushels are annually brought into New York, where they find a rapid sale and consumption with all classes of our people.

But we believe they can be produced in greater abundance and of better size and quality by cultivation, and to a good profit also.—In the neighborhood of Boston they are so produced, and of a size and flavor surprising to those who have only tasted the wild blackberry of the hedge-rows and pastures.

Their cultivation is extremely simple :—Take good land—old pastures are perhaps the best—plow it deeply and well, draw it thoroughly, trace out deep furrows sixfeet apart, and plant in autumn—October or November—four feet apart in the rows, the young sprouts which grow wild in the open grounds. Cultivate them as you would corn, keeping the rows clean of weeds, and topping the bushes in spring, as you would raspberries.—The production of berries will be enormous, large, and delicious in flavor, and sell for double the price of the wild. Try it and see whether the blackberry thus cultivated will not pay. [American Ag.

Beautifying the Homestead.—We claim it to be the duty of every man who is a farmer to plant fruit and ornamental trees, to cultivate and grow the vine, as well as all useful vegetables ; to beautify and adorn his grounds and garden with flowers, plants and shrubbery, and so arrange his yards and grounds as to give his habitation as Eden-like an appearance as possible. Should our farmers be thus true to themselves, and dutiful to nature, then with truth, of our country it might be said, in the language of the poet, 'tis

"The land of the myrtle, the cypress and vine,
Where all but the spirit of man is divine,'



Black Tartarian Cherry.

This splendid variety of the cherry, which is also known by the name of Circassian Cherry, Superb Circassian, Black Russian, Frazer's Black Heart, and Ronald's Black heart. It is said to be a native of Spain, having been carried to Russia, thence to England. It is also said to have been brought from Circassia to England, by Mr. Ronald, in 1794. "It is distinguished for its large, obtuse-heart-shaped, shining purplish-black fruit, with an uneven surface, containing a rich tender flesh, and hangs in clusters. It is a cherry of great excellence, bears plentifully, ripens early in July, and readily commands in the market double the price of the ordinary kinds." The tree grows rapidly, is very ornamental, and is, on all accounts, worthy of cultivatien.

Brick-dust for Cuttings.

A New York correspondent of the Horticulturist writes as follows:

I have had great success in propagating plants lately — especially the more tender kinds of green-house plants. As I think my good luck depends not so much on the treatment as the *material* I use, I beg you to "make a note of it," for the benefit of your readers. The material is brick-dust—the refuse of the kiln after burning—or what may be made by taking soft bricks and pounding them up. Enough may be had at any brick-yard for a mere trifle, to last a great while—but I think the fresher it is the better. For those plants more difficult to root, such as Daphnes, Heaths, Cape Jasmines, &c., I fill shallow cutting pots entirely with brick-dust, excepting about an inch at the bottom, which is filled with coarse lumps of brick, to secure a good drainage. For plants that root more easily, I use half brick-dust and half sandy loam.

It is quite surprising how much more certainly and quickly cuttings of all sorts root in brick-dust than in sand, or in loamy soil, in the common way. "Damping off," which is so fatal to cuttings made in the ordinary way, rarely happens when brick-dust is used, and from the mass of fibre quickly thrown out from the bottom of the cuttings, I am convinced that there is something more than the texture of brick-dust which causes the much greater vigor and success of cuttings planted in the ordinary way.

We have heard, remarks the editor, of burnt clay having been used for striking cuttings with great success, and the brickdust probably acts in a similar manner, i. e., absorbing a large supply of ammonia, from the air, and giving it as food for the cutting, while its dry and gritty texture facilitates the granulation of organizable matter, and the emission of new roots.

SLEEPING FLOWERS.—Almost all flowers sleep during the night. The marygold goes to bed with the sun, and with the sun rises weeping. Many plants are so sensitive that their leaves close during the passage of a cloud. The dandelion opens at five or six in the morning, and shuts at nine in the evening

The "goat beard" wakes at three in the morning, and shuts at five or six in the afternoon. The common daisy shuts up its blossom in the evening, and opens its "day's eye" to meet the early beams of the morning sun. The crocus, tulip, and many others, close their blossoms at different hours towards evening. The ivy-leaved lettuce opens at eight in the morning, and closes forever at four in the afternoon. The night-flowering cereus turns night into day. It begins to expand its magnificent sweet-scented blossoms in the twilight, it is full blown at midnight, and closes never to open again at the dawn of day. In a clover-field not a leaf opens until after sunrise! So says a celebrated English author, who has devoted much time to the study of plants, and often watched them during their quiet slumbers. Those plants which seem to be awake all night, he styles "the bats and owls of the vegetable kingdom."

The Utility of Leaves.

Every person conversant with vegetable philosophy is aware that the all important requisite in the growth of fine fruit is a good supply of big, vigorous, healthy leaves. A tree which is kept defoliated for a single season must die; and fruit growing upon branches which are deprived of their leaves cannot ripen—examples of which are furnished by the instant cessation of growth and ripening of fruit on trees whch become stripped by leaf-blight. In one instance, a dense mass of plums remained half grown and flavorless for several weeks in consequence of the premature dropping of the foliage—a second crop of leaves, three weeks afterwards, effected the completion of their growth and their ripening to honied sweetness. The editor of the Michigan Farmer mentions the following interesting case, illustrating the same principle: Mr. More, of Detroit, has a magnificent grape vine, spreading itself over one side of his house, which was in September richly laden with fruit. After the clusters were formed, a cow entered the enclosure, ate the leaves entirely, but left the fruit untouched. The consequence was that upon that portion of the vine which was beyond the reach of the animal there never were finer clusters, while upon the portion from which the leaves were removed the clusters dwindled away, and have come to nothing; and that, too, up to the very line of seperation between the mutilated and unmutilated portions.

NEW DISCOVERY.—The following we clip from a late letter from of the Paris correspondent of the St. Louis Republican:

And now let me tell you about a most beautiful and interesting discovery which has lately been made by a celebrated Parisian horticulturist by the name of Hebert. I was persuaded to go to his rooms a few days since, and I assure you I had no reason to regret the long walk I had taken. Beneath a large glass case, four or five feet in height, and as many in circumference, were placed pots of roses, japonicas, pinks, dahlias, chinasters, &c., &c., all in bud. By means of a certain gas, invented by himself, and which is made to pass by a guta percha to any pot required, Mr. Herbert causes the instantaneous blooming of the flowers. The ladies in the room asked successively for roses, dahlias and japonicas, and saw them burst into full bloom and beauty, in a second. It was really wonderful. Mr. Herbert is now trying to improve on his discovery, and to make the gas more portable and its application less visible. The secret is, of course his, and his rooms are crowded every day with the most delighted spectators. I wish I could send you the lovely camilla which I received, which, when asked for was so tightly enveloped in the green leaves of its calax, that the color of its flower could not even be guessed at; and yet the request was hardly out of my lips when the beautiful white camilla was in my hand. When he has made a little more progress, Mr. Herbert intends to get out a patent and deliver his discovery to the public.

Woodpecker's Stores.

In stripping off the hard bark I observed it perforated with holes larger than those which a musket ball would make, spaced with most accurate precision, as if bored under the guidance of a rule and compass, and many of them filled most neatly and accurate. Earlier in the season I remarked the holes in most all the softer timber, but imagining they were caused by wood insects, I did not stop to examine or inquire; but now, finding them studded with acorns firmly fixed in, which I knew could not have been driven there by the wind, I sought for an explanation which was practically given me by Captain S——'s pointing out a flock of woodpeckers buisily and noisily employed in the provident task of securing their winter's provisions. It appears that that sagacious bird is not all the time thriftlessly engaged "tapping the hollow beach tree," for the mere idle purpose of empty sound, but spends its summer season in picking those holes in which it lays its store of food for the winter, where the elements can neither affect it or place it beyond their reach, and it is considered a sure omen that the

snowy period is approaching when those birds commence stowing away their acrons, which otherwise might be covered by its fall.

I frequently paused from my chopping to watch them in my neighborhood, with the acrons in their bills half clawing, half flying round the tree, and admire the adroitness with which they tried it at different holes until they found one of its exact calibre ; when inserting the pointed end they tapped it home most artistically with their beeks, and flew down for another. But their natural instinct is even more remarkable in the choice of the nuts, which you will invariably find sound ; whereas it is a matter of impossibility to select them for roasting, to pick up a batch that will have half of them fit for use, the most safe and polished looking very frequently containing a large grub generated within. Even the wily Indian, with all his craft and experience, is unable to arrive at anything like an unerring selection, while in a large bag-full that we took from the bark of our log, there was not one containing the slightest germ of decay. They never encroach on their packed store until all on the surface are covered, when they resort to those in the bark, and peck them of their contents without removing the shell from the tree. [Kelley's Excursion to California.

INTERESTING DISCOVERY.—We are indebted to I. A. Lapham, Esq., for the following interesting particulars relative to the recent discovery of cedar logs, roots, &c., in digging a well on the premises of R. W. Wright of Waukesha, at the depth of 20 feet from the surface. The overlaying deposites are, 1½ feet of soil ; 1½ feet of hardpan ; 1 fine gravel and clay, very hard ; 1 sand with water ; 1 reddish clay with pebbles, and containing sedar wood, logs and roots—the roots with bark yet entire. Underlaying this, as far as excavations have proceeded, are 4 feet of the same kind of clay, without wood, and limestone rock 7 feet. This wood is apparently in the drift formation, and about 50 feet above the level of the river, or any body of water in the neighborhood. The probabilities are, that it was deposited in the bed of an ancient lake, and speedily buried ; and the overlaying deposites may have taken place during a subsequent submergence of the country. This surmise, however, may, on further examination, prove incorrect, and a much later period be conclusively established as the age of this buried wood. At all events, the great changes of surface since its deposition, render the discovery a matter of much scientific interest, and establish one fact at least, that cedar immersed in water is almost as durable as flint, and that these remains are older than the human race.

We trust that a piece of this wood will be deposited in the cabinet of the state university. [Madison Argus.

TO MAKE HENS LAY PERPETUALLY.—I never allow cocks to run with my hens, except when I want to raise chickens. Hens will lay eggs *perpetually*, if treated in the following manner. Keep no roosters ; give the hens *fresh meat* chopped fine like sausage meat, once a day, a very small portion say half an ounce a day to each hen, during winter, or from the time insects disappear in the fall, till they appear again in the spring. Never allow any eggs to remain in the nest, for what is called *nest eggs*. When the roosters do not run with the hens, and no nest eggs are left in the nest, the hens will not cease laying after tne production of twelve or fifteen eggs, as they always do when the roosters and nest eggs are allowed ; but continue laying perpetually. My hens always lay all winter, and each from seventy-five to one hundred eggs in succession. There being nothing to excite the animal passions, they never attempt to sit. If the above plan were generally followed, eggs would be just as plenty in winter as in summer. The only reason why hens do not lay in winter as freely as in summer, is the want of animal food, which they get in summer in abundance in the form of insects. The reason they stop laying and go to sitting, after laying a brood of eggs, is the continual excitement of the animal passions by the males. I have for several winters reduced my theory to practice, and proved its entire correctness. It must be observed that the presence of the male is *not* necessary for the production of eggs, as they are formed whether the male be present or not. Of course such eggs will not produce chickens. When chickens are wanted the roosters of course must run with the hens. [Albany Cul.

IMPROVEMENT IN BEE HIVES.—Mr. Robbins H. Stevens, of Litchfield, Hillsdale Co., Michigan, has taken measures to secure a patent for an improvement in bee hives, consisting of a series of boxes placed in a rectangular case, and which are so arranged that but four boxes are used for one swarm of bees, having communication through all the boxes; but each box has an opening in front, and the whole four openings placed directly in front of a square tube passing through the front board of the case, but with a passage in it for each box. By this means any of the four boxes may be taken from the hive, with the honey it contains, without disturbing the bees or the other three boxes.

Profit of Fowls.

Mr. Cole:—As much is said in these days respecting the profitableness and unprofitableness of keeping poultry, it is well sometimes to post up the books, and ascertain how the account stands. One of my neighbors, Andrew Chapman, a very correct man, has done this. He has kept an account of debt and credit with his poultry, commencing Feb. 1st, 1850, and ending Feb. 1st, 1851. Being aware of the fact, and knowing that any statement coming from him might be relied on with confidence, I felt very solicitous to know how the account stood; and called on him for that purpose. His son, a very worthy man, who took the principal charge of the turkeys, furnished me with the following account. Thinking that it might be of some service to many of your readers, and perhaps interesting to more, I immediately determined to forward it to you, for insertion in the New England Farmer.

The account of his poultry establishment for one year, ending Feb. 1st. 1852, stands thus:

POULTRY ESTABLISHMENT,	*Dr.*
51 Hens and 3 Crowers	$16 50
3 Geese,	4 00
9 Turkeys,	12 00
90 bushels of corn,	58 58
	$91 08
CONTRA.	*Cr.*
30 Hens, including Crowers,	$9 50
3 Geese,	4 00
9 Turkeys,	12 00
2692 Eggs sold,	32 07
90 Turkeys sold,	101 29
1 Goose,	1 00
Amount of Hens sold,	14 73
	$174 59
	91 08
Balance,	$83 51

Not included in the account, 4 Turkeys used by family; 1 Goose, do.; also, dunghill fowls and eggs, and several loads of manure.

Leaving a net balance of $83,51 on an investment of $91 08, which is equal to an interest of 91 2-3 per cent. for the capital employed; and had the value of the items above enumerated been placed in the account the profits would have equaled an interest of 100 per cent. on the capital.

[New England Farmer.

Fire Varnish—A New Invention.—The Paris correspondent of the St. Louis Republican says:

An important discovery, even better than Mr. Phillip's famous extinguisher, is the fire varnish recently brought out by a Spaniard. Don Jose de Gueseda. It was first tried at Matanzas in the presence of the governor and city authorities, and succeeded to the admiration of every body. It has since been tried at Madrid. Five small frame houses covered with tar and turpentine, were erected on an open square. Two of these houses were covered with the varnish and the other two were not. The latter were reduced to ashes almost as soon as they were set on fire, whereas the former, in spite of the tar and turpentine, remained perfectly uninjured to the end of the trial, which lasted two hours. The trial was the most severe as the five houses were close together, and all of them were on fire in the inside, but the flames did not break forth at all from the varnished houses; besides this, in the midst of the conflagration, two gallons of some strong essence was thrown upon the varnished houses, and they were immediately enveloped in flames, but when the liquid was exhausted, the walls appeared perfectly intact as before. Dr. Gueseda is to get out a patent for his wonderful varnish, which he says will become as cheap as it is valuable, and he can put it within the reach of every body.

The Human Hair Magnified.

The following, from Dickens' "Household Words," confirms the oft repeated opinion, that it is a violation of a physiological principle to shave the "human face divine." After some very sensible remarks on the skin, and other organs of the body, the writer says:

"The hair may be called the offspring of the skin; and in health and disease, youth and age, there is a close sympathy between the two. A fine growth of hair, when magnified, might be compared to a plantation of osiers, when the leaves are off; with some difference of course. Human hair is not perfectly round, as it seems to be when seen with the naked eye; nor is it of the same thickness through its whole length. At its origin in the skin, it swells out into a bulbous form, like a crocus-root, or the body of a young spring onion, before the leaves have opened. From this base the hair springs forth, and gradually becomes bulkier as it lengthens. This goes on to a certain point, at which the greater growth is attained; and then the hair grows fine by degrees and beautifully less; until, if allowed its full growth as on the head of a young damsel, its point is many times smaller and more delicate than the portion near the center of its length. Some hair is much rounder more cylindrical than other; some being

oval and some flattened. The flat hair it is that curles most. Adonis and the negro are, therefore, alike in one point at least. Hair; vary much, both in thickness and in length, those on the female scalp being, naturally, the longest of all; and those of the beard of men being next in length, and longer than those of the male head. The hair of the female scalp is not only longer than that of the male, but, in proportion to its length, is larger in diameter. The thickest of all human hair however, is that of the beard of men; and the investigations of this subject tend to justify the assertion of the barbers, that frequently cutting and shaving the hair, has a tendeney to make it thicker. Every hair has a stem and a root, just as a tree has; the root being bedded in the skin just as the tree is in the earth. But the comparison does not end here. The tree has bark, medulla, and intervening substance; the hair has the same. The bark (or cortex) of the hair displays a series of scales placed, one overlapping another, just as we see tiles overlap on a house-top. Immediately below this scaly bark we have a fibrous portion, forming two-thirds of the bulk of the hair. These fibres are seen to seperate when the hair splits from being left too long uncut. The center of the hair has a little canal, full of an oily, marrow-like substance, containing the greate part of the coloring matter; black in black hair, brown in brown hair, and almost absent when the hair has become gray. The marrow of the hair, and its two outer coatings, are well seen in a section of a hair from a well-shaved chin. The razor, day by day, cuts it across; it cannot grow longer, so it grows thicker and stronger; and each slice taken away by the matutinal shave, looks, under the microscope, like a section of a bone; just as a bone is cut across when a ham is cutinto slices for broiling: while the *stump* remaining on the shin has just the same look as the bone on the section of grilled ham ready for the breakfast table. The primly shaved mouth is thickly dotted round by myriads of hideous hair-stumps, with inner layer and marrow all exposed. Fashion ever since the days of Louis Quatorze, has demanded the daily sacrifice, and men continue to pay it. Happily they do not see the stumps of their beards through a microscope, or razor-makers would starve.

"The hair, tortured by frizzling-irons and mutilated by razors, suggests a thought as to the purposes for which portions of the frame were thus carefully covered by the Author of all things."

There are three companions with whom a man should always keep on good terms—his wife, his stomach and his conscience.

Curious Facts in the Animal Kingdom.—Bees are geometricians. The cells are so constructed as, with the least quantity of material, to have the largest sized spaces, and least possible loss of interstice. The mole is a meteorologist. The bird called the nine-killer is an arithmetician; as is also the crow, the wild turkey, and some other birds. The torpedo, the ray, and the electric eel, are electricians. The nautilus is a navigator; he raises and lowers his sails, casts and weighs anchor, and performs other nautical acts. Whole tribes of birds are musicians. The beaver is an architect, builder, and wood-cutter; he cuts down trees, and erects houses and dams. The marmot is a civil engineer; he does not only build houses, but constructs aqueducts and drains to keep them dry. The white ants maintain a regular army of soldiers. Wasps are paper manufacturers. Caterpillers are silk spinners. The squirrel is a ferryman; with a chip, or a piece of bark, for a boat, and his tail for a sail, he crosses a stream. Dogs, wolves, jackals, and many others, are hunters. The black bear and the heron are fishermen. The ants have regular day laborers. The monkey is a rope-dancer.

Artificial Leather.—A correspondent who has recently visited Abbington, Mass., informs us that on going into a shop a few days ago, he witnessed another triumph of art aided and guided by science. A steam engine of six or eight horse power is erected for grinding up the chips and shavings of leather which are cut off by the shoe and boot makers, and which have heretofore been burnt or thrown away. These are ground to a powder resembling coarse snuff, and this powder is then mixed with certain gums and other substances, so thoroughly that the whole mass becomes a kind of melted leather. In a short time this dries a little, and is rolled out to the desired thickness—perhaps one twenty-fourth of an inch. It is now quite solid, and is said to be entirely water proof. On putting the question whether it was strong, the manufacturer cut several strips a foot long and half an inch wide, which our informant endeavored in vain to break.

This new fashioned leather will make good middle soles for shoes, and perhaps inner soles; and would be very durable round the shafts of a carriage, or in any place where mere chafing is all the wear desired. It is supposed it would wear well for some kinds of machinery, and will doubtless be used for many other purposes. A patent has been secured, and the article will soon be in the market and in use. [Exchange paper.

Animal Electricity—The Torpedo.

This interesting science forms a fruitful subject for the pen and abilities of Professor Lovering, a distinguished instructor in Harvard University. He truly avers that large contributions have been made to it within the last twenty years. Previous to this, it had limped along, like a cripple, for the want of proper support.

He first considers animals with distinct electrical organs, and finds that fishes are alone endowed with this peculiarity. The torpedo, the electric eel, the silurus electricus, tetroden electricus, and the trichiurus electricus, originate electrical currents. The last two are not familiarly known.

The torpedo a member of the ray family, inhabits the Mediterranean, the North Sea, the coast waters of France, and is occasionaly found on the Atlantic coast of America, near Cape Cod and Martha's Vineyard. It is common in the markets of Rome, and is eaten by the poorer classes. Steffano Lorenzini, in 1678, seated the benumbing faculty in the two semicircular muscles, on each side of the thorax. Mr. Walsh discovered, in 1773, the different electrical state of the breast and back of the fish, that a connection between the upper and lower surface of the body is necessary to obtain the best shock, which when the fish is in air is four times stronger than when it is in water. Mr. Hunter found two sets of electrical organs run along the length of the body. Each set, sometimes, consists of eleven hundred and eighty-two plates, and appears to be under the wills control.

All agree that the shock is very great.—Kaempire, in 1812, compared it to lightning. After the fishermen have drawn their nets into the boat, they throw water upon the contents, and feel the shock, if any torpedoes are there, through the stream of water. Sometimes, the shock is received through the wet cordage before the net is drawn in. That of a torpedo, fourteen inches long is enough for one man. They can be repeated with great rapidity. A dying torpedo gave three hundred and sixteen shocks in seven minutes.

In 1832, Dr. John Davy, at Malta, with a fish 6 inches long, magnatized a steel needle which was inside a coil of wire, deflected the galvanometer, produced chemical decomposition of common salt, acetate of lead, and nitrate of silver, but failed to obtain any sign of a spark. In 1834, he could warm a fine platinum wire, but could produce no ignition. He could discern no such arrangement of plates as Hunter described, except in preserved specimens. Sometimes the fish weighed only four hundred and fifty grains, and yet it gave shocks, made magnets, deflected the galvanometer, and decomposed water. He kept a nursery of them, and thought their power was for defence rather than for the procuring of food. The first act the young ones did, was to magnatize needles and produce other electrical changes. Some were kept for five months, in salt water, renewed daily. They ate nothing. At death, their stomachs were empty, while their electric energies increased. A few shocks exhausted the old ones, and they soon died. Small, puny, delicate fishes were always more powerful than fat ones of the same age. He could produce no electrical excitement after their death.

In 1835 Bacquerel and Breschet rapidly advanced the researches in the science. Next year, Matteucci succeeded in producing the spark. He held a torpedo just dipped in salt water in a vessel six feet square, and observed a frog, in the remotest part of the vessel affected by the shock, a result beyond the power of a very strong galvanic battery. In 1843, Dr. Storer published an account of one four feet two inches long, captured near Wellfleet. He has published a letter from a fisherman in Princetown, familiar with those waters for 25 years, who says—that in 1819 the electric fish was not uncommon, from sixty to eighty being found annually. Lately they have been scarce, and not over thirty have been taken for ten years. The smallest never weigh less than twenty pounds, and the largest weigh two hundred pounds. Their liver affords from a pint to three gallons of oil. Sometimes, the shock has been felt eight feet from the fish along the harpoon ; at other times, it has sufficed to touch the roap only. The shock is described as producing the sensation of being struck on the head with an axe.

[Fam. Journal.

A great complaint among farmers is, that they have no time to study. But what is the reason? Why cannot the farmer find time for mental improvement, as well as the mechanic? Alas ! I fear that the chief reason will be found in the fact that it is not considered necessary ; yes—knowledge is considered useless in those who form the foundation of civilized society ! As well might we expect to rear a durable structure upon a foundation of *sand*, as to expect the fabric of society to rest securely upon the rotten foundation of ignorance. If knowledge is not necessary to the farmer, then certainly those who do nothing but consume the fruits of his toil, do not need it.

[Albany Cultivator.

EDITOR'S TABLE.

JANUARY NUMBER.

We would give notice to subscribers, who have not already received the January number of the FARMER, that they cannot be supplied before we can have time to reprint it. An edition was printed large enough, as we supposed, to meet all demands for the fourth volume, and leave some 600 beside; but we have not a dozen numbers left, with a large number of subscribers on our books, yet unsupplied. We state it, as a gratifying fact, that, in most places our list of subscribers, as compared with last year, has doubled, thribled, and, in not a few instances, more than quadrupled. Last year we sent 5 copies to Pleasant Branch, Dane county; (comparatively a new town,) where, we have already received an order, to send 24 copies of the current volume. Friend Whittlesey, is the right kind of an agent; and if we had his like, in every town of the state, our list of subscribers would number 10,000 names, within two months. We *must* have half the humber, any way.

GOV. FARWELL WITH US.—We received the following message of the GOVERNOR to the legislature, and the proceeding of the assembly in reference thereto, just as our paper was going to press. We have neither time nor space at present for any comment at length. We thank Gov. FARWELL, as will every friend of the agricultural interests of the state, for his earnest appeal to the legislature, in behalf of the STATE AGRICULTURAL SOCIETY.

Extract from the journals of the assembly, January 23d, 1852.

Memorials presented.

Mr. Cate, of State Agricultural Society, asking aid.

The Private Secretary of the Governor presented the following Message, which was, on motion of Mr. Hackett, referred to the committee on agriculture:

To the Senate and Assembly:

Herewith I have the honor to present the report of the "Wisconsin State Agricultural Society," containing their own proceedings, the proceedings of the several county agricultural societies in the state, an agricultural survey of the different counties, together with essays on the various branches of husbandry, and suggestions for improvements therein. The papers presented are many of them of value, and all of interest. I would therefore recomend that they be printed for distribution among the members of the Agricultural Society.

These papers contain historical facts in relation to the agricultural interests of the state of the first importance, and should be generally understood and carefully preserved.

This society has strong claims upon the state for aid. Hitherto it has struggled along with great difficulty, in consequence of its want of funds, while the results of its labors have been of great value to the farming interests of the state. In nearly all the states of the union legislative aid has been freely extended to similar societies, and from the fact that in Wisconsin the agricultural interest is of great and vital importance as the basis of our wealth, and from the general interest manifested in it by the people of the state, it justly merits and will doubtless receive your approving attention.

LEONARD J. FARWELL.

Mr. Cate introduced a resolution to print 1000 copies of the proceedings of the society, which was referred to the same committee.

Bills introduced.

Mr. Cate, a bill to encourage agriculture, &c.

Which was read the first and second times and ordered printed.

LARGE PREMIUMS.—The executive committee of the New York State Agricultural society offer the following premiums:

For an approved report founded on actual experiment and observation, on the comparative earliness, productiveness, and profits of the different varieties of wheat generally sown, or of any new and superior varieties $25.

For the most approved work on farm husbandry generally adapted to popular use, silver cup, value $100, (or money if preferred. The work not to exceed 200 pages, duodecimo.

Best crop of wheat, not less than two acres, nor less than 40 bushels per acre.....$20

Best crop of Barley, not less than 2 acres, 40 bushels 15

Best crop of Indian Corn, not less than two acres, to be shelled and weighed between 20th Dec. and 5th Jan, 80 bushels..... 20

RURAL ARCHITECTURE.—For the last eight or ten years a decided taste has been manifested in rural architecture. The newly built cottages that meet our eye in almost every direction, tell us in plain language that our countrymen have given some thought on the construction of their dwellings; and instead of consulting the nearest carpenter for a plan, architects of a known taste and skill have been employed, and the consequence is, a taste for beauty and style has been engendered of a most happy character.

We propose in each future number of the Farmer to appropriate a space to rural architecture.—To enable us to make this department interesting and valuable to our readers, we invite from correspondents original plans of dwellings, barns and other farm buildings. We will supply all necessary engravings.

GRANITE SUBSOIL.—The fact that a granite subsoil possesses great fertility, when exposed to atmospheric action, has been established by railroad excavating in New Hampshire. "In many places where the subsoil has been thrown out from any depth by railroad cuttings, it soon becomes covered with a luxuriant growth of red clover, after being exposed for a time to the atmosphere.

A Good Suggestion.—I. Edgecomb of Albion, New York, in a communication to B. P. Johnson, Secretary of the New York State Agricultural society. upon the comparative merrits of the various reaping machines now in use, says:

"My opinion is, it would be right and proper for the executive committee of the state society to appoint a week, or day, during the next wheat harvest, in some wheat growing district in this state, for all inventors or exhibitors of grain reapers, then and there to appear, with their respective machines —if *they pleased so to do*—and enter the field as competitors for the prize, (first, second and third premiums,) in the presence of competent and practical judges, not less than nine, and as many more as may seem necessary. Should your executive committee think proper to entertain these suggestions, I am confident inventors would be prompt in attendance; and with good wheat and good weather, there would be the finest exhibition in the field the farmers ever saw."

We would strongly recommend the suggestion of Mr. Edgecomb, to the consideration of the executive committee of *our* State Agricultural Society.

State Fairs for 1852.—Ohio at Cleveland, September 15th, 16th and 17th.

Michigan, at Detroit, September 22d, 23d, and 24th.

Upper Canada, at Toronto, September 29th, 30th and 31st.

Awards to the United States in the Great Exhibition, London.—

Council Medals	5
Prize Medals	102
Honorable mentions and money award,	51
	158

We believe this gives a larger proportion of prizes, to the number of exhibitors, than is awarded to any other country.

The Use of Thinking.—Galileo, when under twenty years of age, was standing one day in the metropolitan church of Pisa, when he observed a lamp which was suspended from the ceiling, and which had been disturbed by accident, swinging to and fro. This was a thing so uncommon that thousands, no doubt, had observed it before; but Galileo, struck with the regularity with which it moved backwards and forwards reflected on it, and perfected the method, now in use, of measuring time by means of the pendulum. [Street Gaz.

We have received the Journal of the New York State Agricultural Society for January, from which we make the following extracts:

Hereford Cattle.—Erastus Corning, Jun., of this city, received by the ship Ocean Queen, which arrived at New York on the 13th of December, a Hereford bull and heifer, which he purchased when in England, from the Rev. J. R. Smythies. The bull is one year old, the heifer two. We were with Mr. Corning, in Herefordshire, when he selected these animals, and considered them, for all their properties, superior to any of the same age, that we saw at the Royal Show at Windsor. Mr. Smythies, in writing us, says, "I am proud to say that I entertain no doubt they are the two best animals of any breed that ever left England, and if I were ten years younger, I would give a hundred pounds for the bull alone to morrow." Making all due allowance for the strong feeling which breeders may entertain for their own herds, there can be no doubt that this importation will prove a very desirable cross for the valuable stock of Herefords in this country.

Unbranning Wheat for Flouring.—We have a letter from Mr. Bentz, dated Baltimore, in which he says, "he is now in the city, completing his arrangements to put under way his system of flouring, in connection with the unbranning process, the only proper mode of preparing wheat for the best flour and the best bread."

At the great exhibition of London, a Council medal was awarded Mons. Darblay, of France, for his "Gruaux Flour," prepared by his new process. This process consists in removing the bran from the wheat, but by a much more expensive method than that of Mr. Bentz, and not accomplishing it as perfectly. The superiority of the flour, however as compared with the very best on exhibition, prepared in the ordinary manner, was apparent.

Accounts from Japan.—A Hamburg brig, on a trip from Singapore to San Francisco, in a storm, put into Nipaking, a Japanese port, for repairs. It is supposed to be the first foreign vessel which ever visited that port. The report says:

No sooner had Captain Andreson dropped anchor than his vessel was surrounded by three hundred Japanese boats, which guard was kept up, with alternate relief, until he sailed from the harbor.—After some little difficulty he was allowed to go on shore, when an escort of sixty men conducted him with great watchfulness a short distance through the principal street. On landing, he found all the marts and public places closed, although while leaving his vessel he had seen extensive market places thrown open, and an appearance of animated trade going on. Everything presented a blank wall to him, and he was not permitted to gratify his curiosity in the slightest particular. Yet he was treated with great respect and kindness, and furnished with sixty men to prosecute repairs on his vessel. The population of Nipaking he estimated at 25,000 souls.

They treated the strangers courteously, although evidently desirous of hastening their departure.—The harbor is represented as safe and convenient.

Plank Roads.—The longest plank road in the state of New York is 60 miles in length, connecting Rome and Oswego. It cost $1,600 per mile.—There are now completed in the state 274 miles.

FEMALE MEDICAL STUDENTS.—There are forty female students in the Female Medical College, in Philadelphia. Two of the number are from Massachusetts.

MAKE YOUR OWN CANDLES.—Take twelve ounces alum for every ten pounds of tallow, dissolve it in water before the tallow is put in, and then melt the tallow in the alum water, with frequent stirring and it will clarify and harden the tallow, so as to make a most beautiful article, for either summer or winter use, almost as good as sperm.

If the wick be dipped in spirit of turpentine, the candles will reflect a much more brilliant light.

[American Far.

LARD CANDLES.—Mr. John M. Holsington, of Greenbush, Illinois, gives the following receipt in the New England Farmer, for making candles of lard:

To twelve parts, or pounds of lard, add one part of alum, and one of saltpeter: dissolve the alum and saltpeter in water; then put the whole in some convenient vessel, over a slow fire, boil until the water is evaporated, stirring the mixture so as to prevent the alum and saltpeter from settling to the bottom.

Now mould your candles, and you will never wish to be troubled with a lamp about your house again.

REMEDY FOR BOTS IN HORSES.—Half a pint of vinegar, half a pint of soft soap, half a pint of gin, and half a pint of molasses, well shaken together and poured down while foaming: This remedy has been tried in many cases and as yet has never failed to effect a cure. [Exchange.

SANDWICH ISLADS.—When the Sandwich Islands Mission was first started, a young wheelwright in Massachusetts was called upon to contribute for it and was told that his quota would be a dollar. He paid it, but with the feeling then that the dollar was thrown away. Within the present year this same wheelwright has received an order for twenty pairs of cart-wheels and bodies, at ninety dollars a pair.

☞ Sam Slick says, writing from England:

"After all, they haint got no Indgin corn here, they can't raise it, nor punkin-pies, nor quinces, nor pea-nuts, nor silk-worms, nor nothin'. Then as to their farmin'—Lord only look at five great elephant lookin' beast in one plow, with one great lumokin' fellow to hold the handle, and another to carry the whip, and a boy to lead, whose boots have more iron on 'em than the horses huffs have, all crawlin', as if they was a-goin' to a funeral. What sort of a way is that to do work? It makes me mad to look at 'em. If there is any airthly clumsy way fashion of doin' a thing that's the way they are always sure to git here. They are a benighted, obstinate, bull-headed people, the English, that's a fact, and always was."

ASHES TO PREVENT BAD ODORS.—Wood coal, or half burnt peat, or ashes thrown occasionally into privies, destroys the bad smell, and renders them susceptible of being cleaned out and used as manure (and none more valuable can be obtained) without being attended with any disagreeable smell—and producing a benefit to health, and comfort and wealth of community.

A CHINESE LAUNDRY—*How they dampen clothes, and test the sad iron.*—A San Francisico correspondent notices the process of ironing in vogue among the Chinese, and thinks it a decided improvement upon the ordinary method among us. It saves labor.

A bowl of water is standing at the laundries, and used very differently; instead of dripping the fingers in the water, and then snapping them over the clothes, the operator puts *his head in the bowl, fills his mouth with water* and then blows so that the water comes from his mouth in a mist, resembling the emission of steam from an escape pipe, at the same time so directiong his head that the mist is scattered all over the piece he is about to iron.—He then seizes his *flat iron*, which beats the 'Yankees' all to fits. It is a vessel resembling a small, deep, metallic wash bason, having a highly polished flat bottom, and a fire of charcoal continually burning inside. Thus they 'keep the iron hot,' without running to the fire every five minuies, and spitting on the iron to asertain by the 'sizzle' if it be ready to use. This ironing machine has a long handle, and is propelled without danger of burning the finger by slipping of the 'ironing rag.'

LICE ON CATTLE.—Unguentum, a preparation of mercury, says the Albany Cultivator, is most effectual in destroying vermin on cattle, but it is not a safe remedy to be applied to stock running at large, because if they get wet under its operation, it is liable to produce salivation and weaknes of the limbs, &c. Oil, or any kind of grease, will kill the vermin, so far as it comes in actual contact with them. Tobacco decoction will also kill them, but is liable to sicken and weaken the stock for a while. Everything considered, whale oil is perhaps the best application. It should be put on those parts of the body where the vermin attach themselves in the greatest numbers.

THE ARMY AND NAVY.—The expenditures for these two branches of the public service, are set down in the reports of the secretaries of war and navy, as follows:

For the support of the army.....	$9,060,278 58
" " " navy.....	9,044,597 11
	18,104,875 69

A larger sum, by considerable, than is required to control all the cattle and hogs in the country.—What an orderly animal man is!

NEW YORK—NOW AND THEN.—In 1678, one hundred and seventy-three years ago, there belonged to New York, 2 ships, 8 sloops, and 7 boats—15 ships a year came from England. Last Saturday there were in port, 22 steamers, 140 ships, 110 brigs, 174 schooners—in all 530. As for sloops and such "small dere," they are now of no account—boats, beyond counting. [Exchange.

ECONOMY IN CANDLES—If you are without a rush-light and would burn a candle all night, unless you use the following precaution, it is ten to one an ordinary candle will gutter away in an hour or two, sometimes to the endangering the safety of the house. This may be avoided by placing as much common salt finely powdered, as will reach from the tallow to the bottom of the black part of the wick of a partly burnt candle, when if the same be lit, it will burn very slowly, yielding a sufficient light for a bed-chamber; the salt will gradually sink as the tallow is consumed, the melted tallow being drawn through the salt and consumed in the wick.

PRICES IN MINNESOTA.—The Pioneer of Nov. 27, gives the retail prices of provisions in St. Paul, as follows:

Mess pork, $22, to $23; pickled hams, $22 to 23; shoulders, $20; beef round $5 per hundred; beans, 2 to 3 dol.; corn meal, 75 cents per bushel, flour, 5 to 5 50; oats, 30c; corn 35c; buckwheat flour, 5 dol. per barrel; potatoes, 45 to 50c; cabbages, 4 to 5c; turnips, 20c.

Heaves in Horses.

MESSRS EDITORS—This is a disease quite common among horses in Western New York, and many inquiries are made as to its cause. The answer perhaps, I can not give to the satisfaction of your readers, yet from what little observation I have been able to make, I am satisfied that it is the effect of two causes.

First, driving too fast and too far without stopping, and then when the poor animal's blood is heated, permitting it to stand exposed to the chilling wind until cold. This sudden transition is one cause of the heaves. Second, it is caused by feeding clover hay that has not been properly cured; i. e., it is put into the barn quite too dry or too green—in either case it will be unfit for a horse to eat. What farmer is there who has not felt his lungs affected while in the act of securing or feeding clover hay? Now, if the effect is so severe on man, why should it not produce a similar effect on the horse, which at each breath draws into his lungs a portion of the dust.

In relation to curing this disease, I will give you a little of my experience and observation. I have a horse that I found to have the heaves some three years ago, and I tried various remedies that were highly recommended, such as heave powder, nitric acid, &c., but all to no purpose. I finally took the hay, entirely away from him and fed him straw, mill feed and grain. I think however, if I had cut the straw and then wet it up with oat or corn meal, it would have been still better; but as it is the heaves do not trouble him much. The expense of keeping a horse in this way is less than to feed him hay and oats.

J. SIBLEY.

Eagle Harbor, N. Y.

[Rural New Yorker.

Book Notices.

THE OHIO FARMER.—Such is the title of a new agricultural paper just issued at Cleveland, Ohio. The number before us gives abundant evidence of usefulness. It is devoted to Agriculture, Horticulture, Mechanic Arts, Literature, &c.

Published weekly at $2,00 per annum, by Thos. Brown—Messrs. F. R. Elliott and L. S. Everett Editors. We congratulate the publisher, on having secured the services of Mr. Elliott, as conductor of the Agricultural and Horticultural departments of the Farmer. No man in the west, can fill that post with more honor to himself, or profit to his readers, than Mr. Elliott. Years of practical experience have fitted him for such a task.

THE STUDENT.—A monthly, by Fowlers & Wells at $1 per year—devoted to education; including history, biography, natural history and the sciences. It is designed, and we think peculiarly adapted, to both youth and those of riper years. It is beautifully got up in all respects; as every thing *is*, in the publishing line, with which Messrs. Fowlers & Wells have anything to do.

THE WATER CURE JOURNAL.—This is another of Messrs. Fowlers & Wells, monthly publications. The January number, commencing vol. XIII is at hand. It is a practical work; and any family which reads it, and heeds its instructions, will seldom have occasion to call in a physician. Each number contains 24 quarto pages, illustrated with engravings; the number before us contains 25. $1,00 single subscription; five copies for $4; ten, for $7; twenty for $10. It should be found in every family.

WESTERN HORTICULTURAL REVIEW. — JOHN A. WARDER, M. D., Editor and proprietor: Cincinnati, Ohio—$3 per annum.

There is no work more worthy of our attention, or more necessary to the success of western pomologists, and our few florists and arboriculturists, than Dr. Warder's Review. It has been said, and we think with much truth, that no western horticul-

turist can *afford* to do without some strictly professional periodical—and in the west, we have but the one—and that one, we are bound to patronize, not only because there is no other west of tide water; but, that apart from its location, it is well worthy of our support—as a literary and scientific production, and a work of national importance—alike creditable to the west, and the union at large.

It is, however, the *western character* of the Review which recommends it to our readers—in its columns, their interests stand first, and the peculiarities of western soil, and climate, and the many phases of western pomology, and facts and suggestions relating thereto, are fully and seasonably given—and for the three dollars this journal will cost you, we feel confident that you can not fail to receive or save the value of thirty. Take it, we say, and if not satisfied inform us, and we will make the amende honorable, forthwith.

THE FRUIT GARDEN.—This admirable treatise is just the book that those who know him, and have seen the garden and nursery at Mount Hope, near Rochester New York, had looked for, from Mr Barry; and we might close this notice, by repeating the opinion of a western editor, that, "This Book *supplies a place* in fruit culture,"

But, we will add from bitter experience, that the place supplied, is one, that amateur and professional pomologists in the west, have felt to be a great desideratum.

There are few regularly educated horticulturists in this region, and our little practical as well as theoretical knowledge must be drawn from books and periodicals, and in our present state, Mr. Barry's book is indispensable. The propagator and fruit culturist can not afford to do without it.

The valuable works of Downing, Thomas, Cole and others are not the less useful, since Mr. Barry wrote, nor has this writer supplied every place in western pomology. Another Fruit Book is wanted here—and this "place" no one but a western man can supply. For no one but a western pomologist can have any idea of the array of synonyms in western lists, and the difficulty of determining the identity of old fruits, when altered by a new soil and climate. And then, our fruits of local cultivation, and of western origin, have never yet been fully or accurately described in books, and the list is somewhat formidable, and to us, highly interesting.

What has become of the half-promised work of Mr. Elliott, of Cleveland? Who, as it was understood, would have the aid of that noble western pomologist—Professor Kirtland—than whom, no man more deserves our confidence. J. K.

MONTHLY LITERARY MISCILLANY.—This monthly for January is received; commencing vol. 6. It is an excellent family periodical and now is the time to subscribe. Each number contains 48 pages of well selected and original matter, as neatly printed as any monthly in the union. It contains nothing which may not be read by the family circle with profit. It is published in a convenient form for binding, making a volume at the close of the year of about 600 pages, for the small sum of $1,00 Beecher & Quinby, Publishers, Detroit.

VALLEY FARMER.—This valuable agricultural periodical for January, from the valley of the Mississippi, comes to us in a new dress, and otherwise much improved. The Valley Farmer has had about as many ups and downs since its commencement, (three years ago,) as our own paper. We are gratified to learn, however, that it is now permanently established, with flattering prospects ahead. It is an old adage; that a "poor beginning makes a good ending," so mote it be, in the case of the Wisconsin and Valley Farmers.

THE BOOK TRADE.—This monthly, for December, is on hand. H. Wilson, 49 Ann St., N. Y., publisher—25 cents per year. In this work may be found a monthly catalogue (with descriptive notices in many instances,) of all new publications issued from the American press—miscellaneous reading, &c.

TABLE OF CONTENTS.

WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., MARCH, 1852. NO. 3.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER,

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OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

Potato Rot,

IN CONNECTION WITH THE LAWS OF VEGETABLE GROWTH AND DECAY.

Many theories, and not a few of them quite plausible and consistent, have been started within the few years past, in regard to the Potato Rot—the cause of the disease, its remedy, &c. But despite these theories, and the thousand-and-one remedies that have been resorted to, and the infallible specifics that have been administered, the rot has abated not the least in its ravages, and has outlived all carefully and perseveringly applied tests to which it has been subjected, and even increased in malignity. And yet new theories continue to be presented—new experiments to be devised—new specifics to be recommended.—What the end will be we can by no means determine—we will not venture even a Yankee "guess." The true remedy will, peradventure, yet be "hit on," and the potato saved from being "clean gone forever." This is a matter in which all, save a very few, are greatly interested; and he shall be written down among the greatest of public benefactors, who shall develop the remedy.

To our mind no sounder theory, or more accordant with the laws of nature, has been started, than that of Prof. Hoyt in a communication to the N. E. Farmer, for January. We regard it as eminently sound and sensible—and we say so, not to praise the author, but because we think so, and because we are of the opinion that it will be found of practical advantage.

He starts with the assertion, that, "The rot is not the result of occasional causes, but is a disease, partly epidemic and partly hereditary"—that it may be likened unto *dropsy*—that its modus operandi is simply this: "First, the leaves are from some cause blighted.—Secondly, the sap, excessive from want of transpiration through the leaf and uncarbonated from want of contact with the air, becomes diseased, and finally settles down by its own weight into the tuber. Under this pressure of circumstances, the tuber, surcharged and bloated with the corrupt and fetid juices of the decaying plant, rots as in duty bound."—The leaves are the lungs of the plant—the organs of *respiration* and *perspiration*; *in* them the sap or blood undergoes chemical changes requisite to healthy growth and maturity, and *through* them "the watery parts of the sap are thrown off, just as the watery parts of the blood are thrown off by the lungs. If these functions are disturbed, so that the regular and natural processes pertaining thereto do not go forward, disease and death is the inevitable consequence.—The sap would be left to stagnate in the stalks, and this diseased *blood* finding its way to the tubers would infect and destroy them also.

We have by no means done justice to this portion of the article, and have only aimed to impart to our readers the general idea; we pass to the query: "What is the cause of the blight in the leaves and stalks of the potato?" The writer answers this generally by saying, that, it "results from one of two causes—either from the ravages of minute insects or from some peculiar atmospheric influence.—By the result of observation and the occurrence of certain phenomena, he is determined

to the latter, and holds that the atmosphere contains "the noxious cause of the disease." There can be little doubt of this, if we observe, examine and keep watch. Many have come to the same conclusion who have given attention to the matter. What this noxious cause may be, is to all intents and purposes a mystery—it is yet to be learned. But ignorant as we are, "the experience of practical agriculturists and the experiments of scientific men, warrant us in the belief that the disease may be alleviated and counteracted to a very great extent." As a means to this, and means that have been employed with great success, it is recommended :

1. To plant early—the blight making its appearance generally in the month of August.

2. "Plant on light soils," and avoid putting rich fermented manures in the hill.

3. When the blight makes its appearance, sprinkle the tops with plaster, to counteract any excess of carbonate of ammonia in the atmosphere.

4. Lime may also be applied, by way of neutralizing any excess of carbonic acid, to which some have imputed the disease.

5. Select seed from a field that has been exempt from the rot.

6. Mowing off the tops close to the ground, should be resorted to, if the foregoing precautions do not avail, and as soon as the blight appears.

7. Dry the potatoes when dug, put them in dry bins in a dry cellar, and sprinkle with powdered charcoal.—Try it!

For the Wisconsin & Iowa Farmer.

Agricultural Education.

BY JAMES L. ENOS.

Agriculture is an art upon which all other arts depend—a profession in which so large a majority of our race are engaged, it becomes a subject of vital importance, as upon its improvement and prosperity so largely depends the happiness of the race.

Notwithstanding the immense claims of agriculture, very little comparatively has yet been done to secure it a place among the sciences, to be taught in our institutions of learning or even read at the home fireside. Wherever we turn our attention we discover the defects of our system of instruction in this department. Time has been spent and money expended in building up institutions for teaching nearly every other art and profession, but schools for the purpose of imparting a thorough knowledge of the theory and practice of agriculture, have never had a being except in a very few instances and we may say none have been established and conducted so as to effectually establish their practicability. Money is freely expended for almost any other purpose than that of teaching the true philosophy of progressive life. The life of any state rests in agriculturists. And in proportion as they prosper, and become earnestly alive to their true interests—the state bears the unmistakable evidences of prosperity. Farms become thoroughly subdued—neat and convenient cottages arise on every hand—taste and elegance, combine with stern utility and make the country a paradise—admired and praised by every passer-by.

Let our youth be taught the pleasures that may be made to cluster around a rural home in the country ; how honor may be joined with happiness; how merit and true manhood may be made to exhibit itself in the tasteful farm house, and we would see more intelligent young men seeking to become thus established, than rushing to posts of fifth rate lawyers—quacks and dandies.

Agriculture is a science and as such should be taught in all our advanced schools. In thus recommending the teaching of this branch in the schools, I do not consider it essential that model farms should be connected with all such schools ; but I *do* say that every school should have an enclosure where certain branches of agriculture and horticulture could be familiarly instructed. The young misses could learn to cultivate and analyze flowers, and thus, with no special effort, in a few seasons become good practical botanists. The young men could learn the nature of soils and the manner of planting and rearing all kinds of garden luxuries, which instruction could easily be blended by the ingenious instructor, with the sports of boyhood. Lessons thus taught would remain and do vast good by engaging the attention of the young of both sexes, and leading out their minds in a course of pleasing and highly valuable inquiry. In a future number I propose to point out the peculiar kind of instruction which I deem essential for an agricultural people.

Madison, Feb., 1852.

A ploughman on his legs is higher than a gentleman on his knees.

☞ The pigeon flies fifty miles in anhour

The Prospect Ahead!

There never was an hour since our first parents were expelled from Paradise, when the cultivation of the earth had a prospect ahead, like the present.

The governments of Europe have discovered that bread is necessary to quiet rule—hungry men being much like hungry wolves a dangerous and destructive race of animals. And in order to have food for their overgoverned millions, from their own overworn soil, they have found that a better and more rational process of cultivation is indispensable.

Agricultural schools and experimental farms have, therefore, been established, over most of Europe, to educate the few who direct the labor of the many. The eye of science now guides the LIVING MACHINE—the mere animal labor—instead of old tradition, in which the servant was often as learned as the master.—The consequences are seen. In Great Britain, two bushels of wheat are harvested now, where but one grew a few years ago ; and old Europe is fast becoming independent of agricultural America, in the way of bread-stuffs.

But, we are opening up a nobler prospect. We are about to educate the many — and in agriculture, as in the arts, to give scientific "eyes" to every pair of hands, with plenty of "machines" of wood and iron, but no *living ones*—with less than four legs.

Young men remember the first step taken in this country for the advancement of agriculture. Our first agricultural paper saw the light in 1819—our oldest Agricultural Society, can not, we should think, count twenty years of uninterrupted existence—and but three Horticultural associations can count more. And now, we have an agricultural press ; more important and more efficient, than that of the entire Union, not far from the time when our first paper was published ; and our active societies are counted by hundreds, and almost thousands.

But there is more prospect ahead—agricultural colleges and experimental farms are the next steps—and an agricultural bureau is but a preliminary measure.

Massachusetts and New York have moved, legislatively ; but their efforts have been abortions. Illinois—or the people thereof—are acting, with the purpose of creating an "Industrial University" and an experimental farm, also, other states are still more awake ; and Wisconsin is not far behind the foremost—and she has yet a very good chance of being *the very first* to legalize agricultural education. Let her stand first on the list, and shame her elder sisters!

DOWNING, WILDER WARDER, LEE NORTON, and a brave list of able men, and good friends of the poor farmer, have battled long and nobly, since a BUEL first tried to legislate for agricultural education—and we now see the prospect ahead.

Little has been said on the subject of an Agricultural Bureau at Washington—partly on account of its political bearing—but principally because we have had little confidence in the immediate action of Congress on this question—this being the era of *talk* and not *action*, in that quarter—and the business of congress seeming more like "President-making" than legislation.

But, it NOW appears, that we were mistaken. Gov. DOTY writes us, that he has actually introduced a bill for a Bureau—that it has been referred to a committee, of which he is a member—that a majority of the committee is favorable, and will report it to the House, and perhaps recommend other liberal measures for the benefit of agriculture generally—and he adds, that the bill will pass, if our press and our societies sustain our friends in Congress.

Here is another glorious prospect ahead.—Let us fix it now, lest it pass from before us, like the shadow of a cloud when the earth is thirsty for rain.

An Agricultural Bureau may do to begin with ; but we cannot stop there. We deem such a department the mere central office, or acting agency for A SYSTEM of schools, experimental farms, and model plantations.

Mount Vernon, and a school, (every way as efficient for agriculture, as West Point is for war,) will do for a commencement, with a liberal bureau ; such as would not shame the far-

mer at Washington, when compared with other "Departments," and measured by the extent of the interests it should subserve. These we must have, and these we shall have, soon we trust; and these will beget others. But we have done for the present. *

Germination of Seeds.

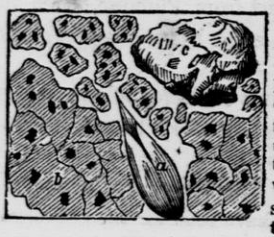
The healthy seed of a plant is a living object.—Though apparently lifeless to the sight and the touch, it has life, and its vitality is capable of exerting great power when excited into action. What the agent is, and how it acts, which excites the vitality of seeds, we do not know, and perhaps never shall know—it may be one of the secrets which nature will keep to herself; but we do know the circumstances in which, when seeds are placed, vitality is invariably excited, and the proof of this excitement is furnished by their germination, which is the first movement towards the production of a plant.

Now the circumstances which excite germination are a combination of air, heat, and moisture.—These must be afforded in the most favorable conditions, before the plant will grow. They may all be supplied to the seed, and its germination secured in the air as certainly as in the ground; but on the development of the radicle, the province of which it is to penetrate into the soil, the young germ, instead of growing upwards, would die, were it kept constantly in the air. The earth supplies all the requisites of air, heat, and moisture to the plant, in a much better state than the air can itself, and the soil continues to supply them, not only at the period of its germination, but during its after life. A vital seed placed in the ground must be affected by three agencies, one physical, another chemical, and a third physiological, before it can produc a plant.

Physical—When a vital seed is placed in pulverised ground it is surrounded with air; for although the particles of soil may seem to the eye to be close together, on examination it is found that the interstices between the particles occupy one-fourth of a given quantity of soil. Hence, 100 cubic inches of pulverised soil contain no less than 25 cubic inches of air. Therefore, in a field, the soil of which has been ploughed and pulverised to the depth of 8 inches, every acre of it will contain 12,545,280 cubic inches of air; and hence also, as every additional inch of depth pulverised, calls into activity 259 tons 5 cwt. 32 lb. of soil, at 1.48 of specific gravity, so the plowing of the soil deeper every inch introduces into it an additional 1,568,160 cubic inches of air. Thus, by increasing the depth of pulverised soil, we can provide a depot of air to any extent for the use of seeds. Suppose that as much as 3 bushels of wheat are sown on the acre, 2,104,704 seeds will be sown, so that each grain will have about 6 cubic inches of air in a soil 8 inches deep.

But this air must be above a certain temperature ere the seed will germinate—it must be above the freezing point, else the vitality of the seed will remain dormant. A pulverised state of the soil affords great protection to the seed from a considerable depression of temperature, and the more finely it is pulverised, the more it will resist the induction of cold from without, and the less will it radiate the heat from within. The less finely the soil is pulverised, such as in fig 1, where a seed *a* is placed among hard clods *b*, on the one side, and near a stone *c*, on the other; with a few particles of fine earth hard by, neither the clods nor the stone can afford the seed any air, which can only be supplied through the few particles of pulverised soil; but cold is easily transmitted by stone from the atmosphere, with which it communicates by its upper surface, and by which also the internal heat is easily radiated into the air. It is clear then, that, in such circumstances, seed is not placed in favorable circumstances for its germination. The advantages of pulverised soil are evident from this figure.

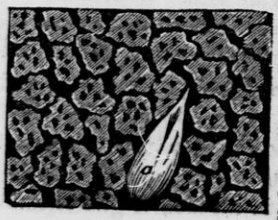
Fig. 1.



CLODY AND STONY SOIL.

Besides by clods and stones, the air may be excluded by water. Fig. 2 represents the seed *a* placed in a pulverised soil, the interstices of which are entirely occupied by water, instead of air, as well as the interior of all the pulverised particles of it. It is also clear that, in this case too, the seed, being deprived of air, is not placed in the most favourable circumstances for germination. Besides the direct exclusion of the air, the water, on evaporation, renders the earth around each seed much colder than it would otherwise be. The evils of the excess of moisture are evident from this figure.

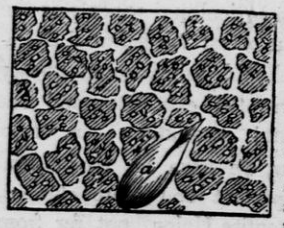
Fig. 2.



SOIL WITH WATER AND WITHOUT AIR.

But total want of moisture prevents germination as much as excess. Fig. 3, shows the seed *a*, placed in pulverised soil, and the interstices filled with air, but no moisture is visible between and in the particles of soil.—In such a state of soil, heat will find an easy access to the seed, and as easy an escape from it. The evils of the want of moisture, and of excess of heat are evident from this figure.

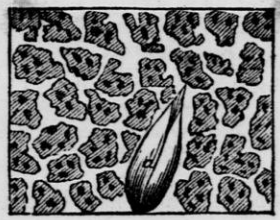
Fig. 3.



SOIL WITH AIR AND WITHOUT WATER.

Fig. 4 represents the seed *a* in soil completely pulverised; between every particle of the soil the air finds easy access to the seed; and in the heart of every particle of soil moisture is lodged. All that is here required in addition is a favourable

Fig. 4.



SOIL WITH WATER AND AIR.

temperature, which the season supplies and germination proceeds. [Farmer's Guide.

Agriculture—No. 2.

Of the importance of Agriculture—of its weighty bearing on other pursuits—its close and inseparable connection with the greatest good of a state or nation—identified with all that can impart true glory to an age or people—it is not necessary that we speak further. The observation and experience of every intelligent mind, will have demonstrated, that it underlies all the great secular interests of a people, and is in very truth the foundation of every species of business and trade, and a living element in manufacturing and commercial prosperity.

And why should it be thought less honorable, or reputable, than other pursuits? How much suffering might be avoided—how would the amount of poverty, wretchedness, and woe, be lessened—were it not for that most pernicious idea; that labor is disgraceful, and that to till the ground, is a low and mean employment! Because of it, thousands—miserable thousands—are kept from following the plow, or wielding the axe, the hoe, the spade, thus developing the hidden wealth of the soil, and securing health, wealth and happiness.

This idea has had an influence upon even agriculturists themselves. They have looked upon their calling, as hard and degrading—many have loathed it, as though it were drudgery only; and thus they have sought for no improvement—for none of the means and requisites of progress.

But we rejoice that, far more than formerly, there is now a spirit of improvement abroad, with reference to this high, but neglected calling; and not a few who are engaged in it, have already learned to their great advantage, that improvements may be made in this as well as in others, and that the discoveries of the age and the developements of science, are but furnishing agencies, for the promotion of the interests of Agriculture.

Agricultural Exhibitions and Fairs—County and State—have, perhaps, as much tended to awaken, and increase this spirit of improvement as almost any means and agencies that might be named. They have begotten a healthful, earnest competition; and the farmer has been led to study, investigate, experiment, labor, tax his enterprise, and all his available resources, that to him might be awarded the palm of superiority, over his competitors, or at least, that he might not fall very far in the rear of his neighbor in all real improvement.

These exhibitions, although but recently introduced into our state, have already exercised no small degree of interest, and awakened a lively spirit of improvement that can only be regarded as an earnest of great good to come. They will assist materially, we are confident, in developing a better state of things, and in relieving, through a healthful and permanent progress, the agricultural branch of industry, from present and great embarrassments.

It has been, and still is the case here, to a considerable extent, that only a part of a small portion of the science, or even of the common practical details of agriculture was, and is known; and men who had entered upon its labors, disregarded what, elsewhere, and under other circumstances would have been deemed important and essential to success. And it will be found now, quite too generally, that there is a slowness in the application of new truths to a new condition of things, and in the use of new and wisely adapted means, in the cultivation of the soil. Now the improved practice of a few farmers of the right sort, through exhibitions and fairs, will tell wonderfully in this direction—awaken interest, call up slumbering energies, and crown all true effort with abundant prosperity.

He that has a trade hath an estate; and he that hath a calling hath a place of profit and honor.

For the Wisconsin & Iowa Farmer.

FRIEND MILLER :

I have often seen set forth in papers, the necessity of farmers underdraining their wet lands, but I do not recollect having seen how the work is to be performed so as to be permanent and useful. Being well acquainted with the way it is done in Europe, it may not be out of place to inform the readers of your valuable Cultivator. As there are many acres of land in Wisconsin and in other states, that are so flat, and others, with a kind of springy bottom, that retains so much wet, that the grass is thin, rank and sour ; in fact such lands are next to useless. Those lands unless their surface is a dead level, can be brought into a state fit for cultivation or for good pastures, by the following described way of draining:

Lands having a certain declivity, or moderate descent, so as to afford an outlet, by beginning to cut a ditch at the outlet, of twelve or fifteen inches wide in the bottom, as deep as the outlet will allow, and continue this drain in the lowest part of the land ; then, if the bottom is hard, put two rows of stones one on each side in the bottom and cover with large stones, and chink with small ones, then a little straw or hay on the stones and fill up with the earth, sow grass seed, &c. The drain is to be dug deep so as the water will follow the workmen. If the bottom is springy, so that the stones would sink, I would put two rails on the bottom, and a wide one on the top, or slabs or lumber, or even brush. If such a drain can be two feet deep, it will draw the water from one and a half to two rods on each side ; the deeper the drain the further it will draw. Four feet is deep enough for any land, as it will stop the small springs from assending to the top. The side stones and covering may be twelve to fifteen inches from the bottom and will let out a quantity of water. Then if more drains are required I would recommend to make them obliquely as at at an angle of forty-five degrees and to empty into the first or main drain, and so on, till the whole land is properly reclaimed. I have near half a mile of such drains on my farm—some with stones and some with timber, and they all answer well ; much better than open ditches, for the plow or waggon can go over them without hindrance.

N. LE PREVOST.

Oakland Farm, Mt. Pleasant, }
Racine Feb. 12, 1852. }

For the Wisconsin & Iowa Farmer.

The Onion.

FRIEND MILLER—I have been requested to lay before your readers my method of cultivating the *Onion ;* and with your permission will do so as briefly as possible:

1st. *Preparation of Ground.*—The first essential in the cultivation of this vegetable, like that of every other, is to have the ground thoroughly prepared for the seed. The ground for this crop, however, must not be broken too deeply. In no case should it exceed 1½ inches, and it makes very little difference what kind of soil is below this, if the surface is well subdued.

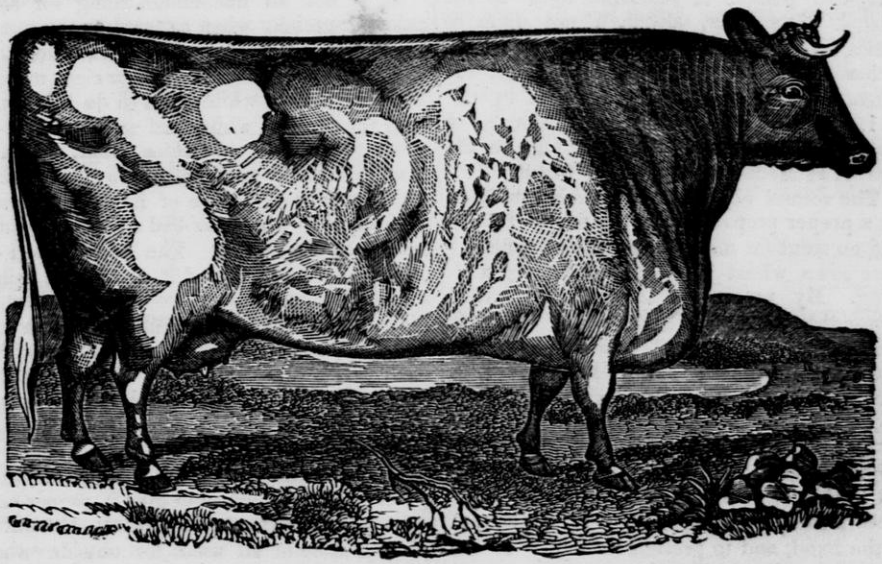
2d. *Seed.*—By putting the seed in a dish of cold water, the good will sink to the bottom and that remaining at the surface should be removed as useless. The good seed may be left for two or three hours in the water previous to being sown, with some advantage to it.

3d. *Time and Manner of Sowing.*—I have usually had the best crop of onions from beds sown about the first of May, though any time will do after the ground becomes warm. If the ground is free from weeds an abundant crop may be raised by sowing broad-cast ; it is, however, best to sow in drills about five inches apart. Like other vegetables onions should be kept free from weeds, and the ground frequently moved about them. The seed should be covered very lightly. As soon as the plant has become well rooted the tops should be carefully bent over, to prevent too luxuriant a growth of tops. This process will have to be repeated three or four times.

By pursuing the above course, I seldom, indeed, have never failed of having an abundant harvest.

J. L. ENOS.

POPULATION OF BALTIMORE.—Baltimore contains a population, according to the new census, of 169,812. Of the whole number, only 3,134 are slaves. In 1840, the number of slaves was 3,199.



Short Horn Cow, Cambridge.

"This cow was bred by Thomas Bates, Esq., Kirklevington, Yorkshire, England, by whom she was exhibited, at the meeting of the Royal Agricultural Society, in 1840, when eight years old, where she won the first prize for the best cow of any age.

"The Short Horned, or Durham breed of cattle hold a high rank in England, particularly for beef; and in some of the large milk establishments, this breed is preferred. In this country, particularly in the west, the introduction and general diffusion of this breed has made a vast improvement in stock, not only where this race is kept pure, but there has been great advantage in crossing it with the common breeds of the country, as blood stock generally stamps its peculiar characteristics upon the cross. The great gain by the use of the Short Horns is in their early maturity, by which they are as well ripened for beef at three years of age, as the common stock at four. Every farmer is aware that this is an important consideration."[N. E. Farmer.

Spring Wheat.

Every thing relating to the successful cultivation of spring wheat, will be read by every farmer in this section of the state with interest. We would commend to the attention of our farmers, the following article, upon this subject, written by Judge Jessup of Montrose, Pa., for the Farm Journal. Very much of the spring wheat sown in this section, is put into the ground too late and without any preparation whatever of the seed. We think if farmers hereabouts, where the blight or rust have prevailed to a greater extent than elsewhere, would pay proper attention to the selection of healthy seed, its preparation as here recommended, and sow earlier, this important crop would be brought to maturity some ten or fifteen days earlier, than has usually been the case, and thus escape rust or smut. We might also add—that in preparing the ground for wheat, a little deeper plowing, than is usually practiced, would be no drawback in the growth and early maturing of the crop.—If there is any clay that can be reached by the plow, fetch it up and let it be well compounded with the surface soil. These hints heeded, less will be heard about bad wheat crops in Wisconsin.

"This grain is already very important to large farming districts in Pennsylvania, and may most profitably be cultivated in many parts of the state where winter wheat in a measure fails. The objections urged against it generally, are three.

1. That it is inferior in quality. 2. That it is liable to smut; and 3. That it is an uncertain crop, owing to its being so frequently blighted and shrunk by mildew. But from an experience and examination of seven years, I am convinced that these objections are not well grounded. As in all crops, the quality depends much upon cultivation. With good

cultivation the Italian wheat weighs sixty to sixty-two pounds of superfine flour to the bushel. The flour, although not quite so white, makes as good bread as any other wheat. It has usually a slight yellowish tinge. If wheat were not *too much* judged of by the whiteness of the flour, I doubt not that good Italian wheat would soon rank as high in the market as Mediterranean winter wheat.

The second objection is entirely obviated by a proper preparation of the seed. I have had no smut for many years except where I have sown wheat without washing and liming. My process is to wash my wheat thoroughly in strong lime, which raises to the surface, all oats and other light seeds, which are skimmed off. While wet it is thrown upon the barn floor and finely pulverised quick lime in small quantities is sifted over it. The whole is so mixed that every kernel is coated with lime. It may safely be left in this way for several days before sowing. If sown immediately, the lime is unpleasant to the hand, and to prevent its injury to the sower, a small quantity of gypsum is scattered over it. No smut is ever found in spring wheat prepared in this manner. The salt, lime and gypsum are all admirable manures.

The third objection is obviated by early sowing. In large districts in the northern part of the state it is difficult to plow early. The soil is a heavy clay and loam and retains the water very long. It is absolute ruin to the crop to plow while wet, and consequently the farmer who relies upon spring plowing for his wheat will be unable to sow before the last of April or the first of May—a month too late here. The plowing must be done in the fall and the sowing at the earliest practicable day after the frost is out of the ground. The best spring wheat in quantity and quality, which I have ever known raised was upon a green sward, which had been turned under late in Nov., and upon which the wheat was sown without farther plowing, the latter days of March. A very light dragging lengthwise of the furrow, before sowing, and the wheat was lightly dragged in so as not to raise the sod. Sown in this way it will be fit to harvest during the latter part of July. Wheat which ripens in July is seldom affected by mildew. Two bushels of seed should be sown per acre.

I have tried the Baltic wheat, which is said to be succesfully cultivated in Vermont, but it is greatly inferior in quality as well as quantity to the Italian."

The eye of a master will do more work than both his hands. Not to oversee workmen is to leave your purse open.

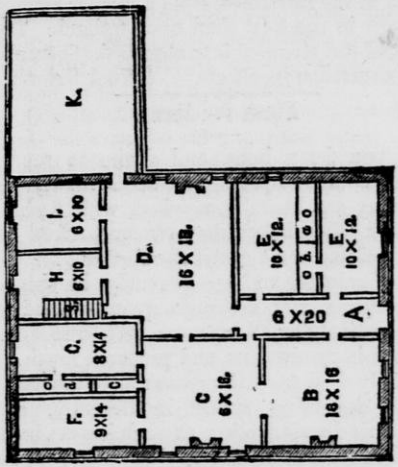
The Using of Paint.

It is not an uncommon thing for some paints, especially when exposed to the atmosphere, to rub off like whitewash, after they had been put on for about six or eight months. We have known white paint to do this, altho' both the oil and white lead were said to be good. In respect to white paint, which is most extensively used, there are three things which may be the cause of its inferiority and rubbing off. These are bad oil, bad lead, and too much turpentine. The best linseed oil only should be used, and it should be boiled, but not too long nor at too great a heat.—Linseed oil is frequently adulterated with sunflower oil, which is very inferior to that of linseed.

Sometimes white lead is sold which is very inferior to others, but painters know how to judge between the good and bad. The best can easily be ascertained by painters from the quantity of oil required to give it proper consistency. In mixing paints, there should be no turpentine at all used for outside work, (at most the smallest possible quantity) because the turpentine makes a soap of the oil, consequently, it will soon rub off or be washed away by storms, &c. The only benefit of boiling linseed oil is to drive away its moisture and ammonia, so that the glutten of the oil will form a beautiful skin of varnish, when dry, to protect the lead from the effects of the atmosphere, while turpentine forms a good varnish with resins and gums, its combination with oil is altogether different, forming a soap, hence those who know not this fact and use too much turpentine with their paints for outside work, may expect to see it disappear before it is very old. The best way to put on white lead for outside work, is to commence with a very thin coat, and let it dry perfectly. It is better to put on four thin coats, one after another than two thick ones. The labor, to be sure is more expensive, but those who buy their own paint, and use it in the country, will find out that it will be a saving in the end.

[Scientific Amer.

Guano.—It has been established beyond controversy, that guano is the best aid that can be applied to wheat and corn, but we were not aware that it was so peculiarly adapted to the growth of tobacco. A gentleman in Louisiana, who is largely engaged in the growth of the tobacco plant, made an experiment in the last season, and he has satisfied himself most thoroughly of its entire adaptation to the growth of that crop. This is a matter of very considerable importance as thousands of acres of the old tobacco lands in Virginia may be reclaimed. [Fred'k. Herald.



Plan of a Farm House.

Size 46 by 34 feet. *A.* represents the front hall, 6 by 20 feet ; *B.* the parlor, 16 by 16 ; *C.* the family room, 16 by 16 ; *D.* the kitchen, 16 by 18 , *E. E.* two bedrooms, 10 by 12 each including the clothes press, *o. o.*; *F.* the family bed-room, 14 by 9 ; *G.* the young children's bed-room, 14 by 8 ; *H.* store-room 10 by 6 ; *K.* wood house ; *c.* closet for the family room ; *o. o.*, clothes presses ; *S.* chamber stairs ; *I* pantry or milk-room, 6 by 10.

This plan combines both cheapness and convenience.

Sheep of the "New Leicester."

It is to the philanthropic and indefatigable exertions of Robert Bakewell, Esq., of England, that we are indebted for the improved Leicester. "Previous to his time," says a late writer "this animal had been bred with exclusive reference to large size, and weighty fleece, without regard to symmetry, or the quality of flesh or fleece. Aptitude to fatten, and early maturity, were also minor considerations." In the "American Shepherd," an invaluable work by Morrel, the New Leicester is thus described :

"The head should be hornless, long, tapering toward the muzzle, and projecting horizontally forward. The eyes prominent, but with a quiet expression. The ears thin, rather long, and directed backward. The neck full and broad at its base, where it proceeds from the chest, but gradually tapering toward the head, and being particularly fine at the junction of the head and neck ; the neck seeming to project straight from the chest, so that there is, with the slightest deviation possible, one continued horizontal line from the rump to the poll. The breast broad and full ; the shoulders also full and round, and no uneven or angular formation where the shoulders join within the neck or the back—particularly, no rising of the withers, or hollow behind the situation of those bones. The arm fleshy through its whole extent, and even down to the knee. The bones of the leg small, standing wide apart, no looseness of skin about them, and comparatively bare of wool."

The New Leicester has long been known in this country, and now quite generally disseminated in the British Provinces. Those who contemplate the introduction of them into their flocks should be reminded that they are well adapted to lands of tolerable fertility ; but they are injured by a too luxuriant pasturage. At least, so say those who have had much experience in their management. In this respect they differ from the Cotswold and other gigantic breeds. Hilly, or broken lands, on the contrary, are not well adapted for the pasturage of the Leicester, as they are of large size, and being heavy, should not be compelled to go far, or be much exposed, in obtaining a supply of food. If those of our friends who are in the habit of raising sheep for the market, would, instead of keeping the smaller and more diminutive breeds, introduce a few breeding Leicesters for this purpose, they would soon find the difference between small and large sheep, when the latter are of good breed, for this purpose. A kindly disposition to take on fat, with a robust development of carcass, are important points, where the meat is the object.

[N. E. Farmer.

A New Englander.

Near Claremont, N. H., Nov. 20., 1851.

Mr. Editor—I herewith communicate an item of experience in sheep husbandry, which if not new to your readers, is corroborative of experiments tried by others. A single experiment will not establish a principle ; but frequent experiments, attended by the same results, will warrant the conclusion that the relation of cause and effect exists between the efforts made and objects attained.

It is generally conceded that wet pasturages are unfavorable to the health of sheep. I have kept a flock for four years, in a pasture of that description—for the first two years with unfavorable results. My sheep were unhealthy, and many of them died. I ascribed it to the wetness of my pasture. Upon the recommend of an old farmer I fed my sheep *charcoal* mixed with salt. The beneficial effect of this mixture was soon apparent. My sheep presented a more healthful appearance. I have continued the treatment and my sheep

have continued to thrive. I suppose the medicinal qualities of this mixture consists in the *disinfecting* property of the charcoal.

I was much pleased with an article from your Texas correspondent in the October number of your valuable journal. That wool growing is profitable in such a climate, with a soil naturally rich and productive, can not be doubted. And it is far from being unprofitable, with us, in the central part of Michigan. Snow does not fall to a very great depth, and it is not uncommon for the ground to be bare half or two-thirds of the winter.—A pasture of orchard grass, (*dactylis glomerata*) not fed in the fall but reserved for winter use, will keep in good condition a flock of sheep through the winter. This grass is not as highly appreciated as it should be. It is, perhaps, owing to the fact that its merits are not generally known. I append a description of it, extracted from a favorite author :

"Orchard grass, or dactylis glomerata, is one of our most valuable grasses either for mowing or for pasture ; and particularly so for shaded grounds. Some farmers have complained of its growing too large and coarse ; and if sown thin on rich ground, such will be its character ; but when mixed with other seeds, such as timothy and clover, or rye grass, it grows thick and fine, is fed by all animals with avidity, and springs after mowing or feeding with greater quickness and rapidity than any grass with which we are acquainted. We may remark here, there are several kinds of grass known among farmers in different parts of the country, as orchard grass, but widely differing in their qualities from the dactylis, or true grass."

There are a few qualities, not enumerated above, which I will add. When horses are fed with clover they are very liable to "slobber." Sow four quarts of orchard grass seed to the acre with your clover—it is an effectual preventative to that unnatural discharge of saliva. This grass thrives the best on moist—but not wet land. It is not liable to 'run out,' but is tenacious of its rights and will not yield to the intrusions of june grass or other trespassers. Z. Z.

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Remarks.—Our correspondent writes too well to make his communication anonymous, and we hope to hear from him often. The facts he communicates are important, and should be well observed. We have never grown the rye grass but if sure that we could get the genuine seed would try it. The charcoal experiment is a very important one.—Feeding in wet pastures, sheep will necessarily become more subject to a greater quantity of gas in the intestines, from a greater amount of water in the food than upon upland. The effect of the charcoal is to absorb that gas, and thus neutralize its effects. [Wool Grower.

Flesh for Hens.

If you keep hens, and desire to render them a source of profit, as well as luxury, see that they are liberally supplied with flesh.—The fish taken in ordinary streams, afford an excellent and most grateful substitute for the flesh of animals, and can generally be obtained in almost any desirable quantity, and at comparatively small expense. When at large, the hen is carnivorous, and procures much of her daily food from the resources of the insect world, devouring almost indifferently, and with little discrimination, all such insects, bugs, flies and worms, as fall in her way. These promote fecundity, and in situations where she is deprived of the privilege of catering for herself, either these, or some adequate substitute, in the form of more solid viands, must be supplied, or she will cease to lay. Neglect of this, is the principal cause why hens, closely confined, are so generally complained of as unprofitable. [Granite Farmer.

Illinois Farming.

The experience of the present year, though somewhat dearly bought, will, in the end, prove profitable to our farmers, we have no doubt. They have learned by this time that so much uncertainty attends the cultivation of wheat that it must be abandoned as an article of export, and some other article or articles be substituted in its place.

The low price of wheat this fall would not pay for raising it, even if the crops had been good. But when we take into consideration the fact, that taking the average of the whole county, probably not more than one fourth of a crop was raised, and that not more than three shillings a bushel, on an average, can be obtained for it, the prospect of getting rich by raising wheat looks discouraging enough.

We have been convinced for years that the raising of beef and pork was the most profitable business in which Illinois farmers could engage. The present high prices of the articles, and the facilities now opening for taking cattle and hogs to the eastern market, hold out the fullest assurances that these prices will still continue.

We are aware of the difficulties in the way of bringing about the change at once. A great many of our farmers commenced poor, and having had not only to live, but their farms to pay for and improvements to make out of what they could raise on their farms,

they could not raise the means necessary to procure large stocks of cattle ; and even what they have raised they have often been compelled to part with for the purpose of "making the two ends of the year meet."

Our farmers are are now getting out of debt, and will soon be able to raise stock to any extent that they may wish. But those who for want of means, are not able to turn their attention to stock raising, certainly can raise corn—a much more profitable crop than wheat. The corn crops we have never known, in an experience of 15 years in Illinois, to prove a failure. And we have been assured by farmers of much experience, that even if they could be sure of good crops of wheat, corn was the most profitable to raise.

The editor of the Prairie Farmer, who is more familiar with such things, probably, than any other man in the state, in a recent article upon the subject, says :

"Several years ago, we made the inquiry of several corn growers in Middle Illinois of the absolute cost per bushel to the producer in the crib. There was very little difference in their calculations which ranged from four to six cents ! This to an eastern farmer, is both inconceivable and incredible. The truth is they know little of mode in which the crop is grown in the districts natural to it. In the first place the land, perfectly smooth of all impediments, undergoes a single plowing. The marking off is done in a comprehensive manner, and the planting if not by machinery is on such a scale as to cost but little. The hoe, in the best corn districts, is not used in keeping it clean—the cultivator, a plow of some sort, with a horse to draw it to do the work ; and with rows from a half a mile to two miles, or even more in length, the surface of the ground in this crop of which one man with one horse can take the care is incredible to a novice."

If for the future, more attention shall be paid to the cultivation of corn, and to the raising of cattle, the loss of our wheat crops, for two or three years in succession, may prove a benefit to our farmers instead of an evil.

[Joilet True Dem.

Method of Keeping Store Hogs.

S. N. WATSON'S STATEMENT.

The following is my method of keeping store hogs, which I enter for the Society's premium, hoping that many others will do the same, so that if mine is not the *best*, your report will show me a *better* one.

I generally winter August pigs. The first month after weaning, I feed on skim milk and green corn—after that on boiled apples, pumpkins, potatoes, and a little barley or Indian meal, with the milk, until about the first of January, when I commenced feeding on raw ruta bagas, cut the same as for cattle, and what swill is made from the house. This I continue until June, when my ruta bagas are generally gone. I then commence cutting grass, weeds, &c.; soon as they are grown, and soon as my ruta bagas are large enough to thin out, I take such as can be spared and feed them—they will eat these as readily as green corn. Soon as my corn begins to ear I commence cutting suckers and false stalks for them and continue this until I begin to boil food for fattening.

Now for the place where I keep them.—Soon as I slaughter my old hogs, I put them under my horse stable, which is a manure cellar, where I throw my horse bedding and manure, also all such rubbish as I have that will convert into manure ; this enables them to do much to pay their fare as they go along. The place is warm, which enables them to labor in winter as well as summer. From three hogs, (which is my usual number,) and three horses, I make ten cords of manure yearly, which I prefer to any other manure which I have, especially to put in the hill for corn, which I put in green and cover with earth before dropping the corn. I consider it essential that we make all the animals we keep do something towards paying for their keeping. Give the hogs a suitable place and materials, and they will do *much* towards paying their bills.

[Maine Far.

The Grase Tree.

Ar. Acton Warburton, in his account of the expedition of Bethencourt to the Canary Isles, has a note in which he gives a description of the *grase* or water-tree, which grows on the island of Hiero, one of the group. It was, he says, "an evergreen growing in the middle of the island. There was a great scarcity of spring-water, but this tree afforded abundance for all the islanders and their cattle. The water does not exude from the tree, but is produced in this manner. Every morning a mist rises from the sea, which is borne by the east winds (blowing here constantly) against the steep rock where the tree stands ; there it stops, and settles upon the leaves, which are of an enormous size, whence it distils in drops during the day. The drops are received in large troughs, which are guarded by people living near the place, and whose duty it is to distribute it to all who come.—The Hierians are still supplied with water in this manner." [Boston Rambler.

HORTICULTURE.

Brief Horticultural Notes—No. 2.

BY JOHN A. KENNICOTT, M. D.

As I send off as fast as I write, and write without copying, I may sometimes repeat; but I will try to be brief and practical.

Most of our thoughtful and observing physicians, now declare, that the free use of ripe fruits not only *prevents disease*, but their regulated enjoyment often helps to remove that which already exists.

All ripe fruits are, also, more or less nutritious. Professor Salisbury has clearly demonstrated that the APPLE is superior to the POTATO, in the principles that go to increase the muscle and the *brain* of man—and in fattening properties, it is nearly equal to that plague-stricken tuber, when cooked for swine, or fed raw to other domestic animals.

I will but glance at another office of TREES—besides their protection of our dwellings from the rough winds of winter, and the blistering sun of summer—and then pass to other questions.

Trees thrive on the unwholesome exhalations of animals, and decaying organized matter—converting to their own use, what would be hurtful to man—but this is not all. A belt of trees, surrounding a dwelling, or only a partial barrier, of these leafy sentinels, on the exposed sides of the house—will arrest the silent march of the "malaria," or supposed cause of Western fevers, and make that home a healthful exception, when all around are suffering from this curse of a warm climate, a rich soil, and a new country! But let this pass for the present; while we speak of the *profits in money*, of a crop of fruit, and the expense of an orchard.

There is not the shadow of a question, that all other fruits, when successfully cultivated, pay better than the apple. We are, therefore, entirely safe, in basing our estimates on this well known and hardy fruit, which, well cared-for, seldom fails of a partial or a full average crop.

Under favorable circumstances, (which every planter can control,) about one half of the ordinary range of varieties in an orchard of 100 trees, will come into bearing in five, and the balance in ten years after planting—and after the first ten years, we can certainly count on an average of five bushels of fruit per tree, during a life time—and we can reckon on, at least, 50 cents per bushel, for the next fifty years, during the most fruitful seasons; and from that, to one dollar, in seasons of partial or general scarcity.

I cannot, therefore, put the average annual income of one hundred well selected, and carefully cultivated apple trees, at less than two hundred and fifty dollars.

And now, for the *cost* of one hundred apple trees, ten years after planting in orchard. The first cost of trees, which is the one that always governs chance planters, is the merest trifle, compared with the eventual profits.—For example: We sell one hundred *selected* apple trees, at this nursery, for $15 to $16; and those large enough, at from a dime, to one shilling each, by the thousand, or even a large fraction of a thousand—and I think other nurserymen, all circumstances considered, give equally good bargains.

We will suppose the land worth $15 per acre and about an acre is enough for 100 trees, where fruit is to be the only crop, after the trees come into bearing. The calculation will then stand, on a safe estimate about thus:

Land, ...	$15 00
Picket fence, ...	25 00
100 selected trees, ...	15 00
Average cost of transportation .	5 00
Preparing the ground, ...	5 00
Planting and Mulching, . . .	10 00
Interest account, (ten years,) .	75 00
Cultivation and manure, do. .	50 00
	$200 00

Here, on this small scale—which will cost near twice as much, in proportion, as an orchard of twenty acres—and without deducting a cent, for the vegetables and corn, you *should* raise between the trees, during the first five years, and the fruit you may gather from them, during the last five—you have only four-fifths of the estimated value of *one*

average crop of fruit—and the entire after expense of interest on outlay, manure, cultivation and gathering, and marketing the crop, will not exceed some twenty-five to thirty-five dollars per year—leaving a clear income of over two hundred dollars, from one hundred trees. And I will add, from my own experience, and a hundred recorded cases—that I have no doubt, that under favorable circumstances, the vulue of the produce of fruit, and other suitable crops, during *the first ten years*, will pay all expenses, and leave the orchard clear of cost to the proprietor.

THE GROVE, Northfield, Ill., Feb. 5.

Spring Work in Orchards and Nurseries.

The following articles, upon the various modes of grafting, we republish from former numbers of the Farmer. The information they impart, will be new to several hundreds of our new subscribers; while it will refresh the memories of our old ones, admonish them that the season for grafting is at hand and the proper time for performing the operation brief:

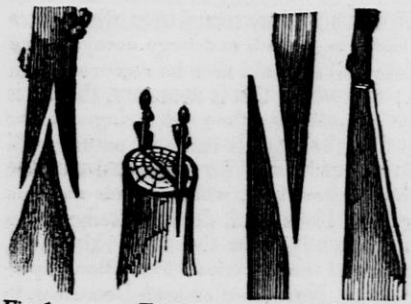

Fig. 1. *Fig.* 2. *Fig.* 3

GRAFTING.—This mode of propagation is admirably adapted to the apple, pear, plum and cherry. Cherry trees should be grafted very early, or by the 1st of this month, and plum trees during the latter part—but will take, in part, if done later and under favorable circumstances. Pear and apple trees may be grafted at any time from the first opening of spring, till the buds open, and even till the leaves expand; but when done so late it is not safe, and care must be taken not to start the bark from the stock. Pears may be grafted successfully on our wild thorn, and the apple on crab-apple, but cannot be relied on as permanent trees, as our winters destroy many of them. Were we disposed to do our utmost with them we should graft in the root, put the scion a few inches below the surface, and earth up around them, and mulch them during the summer so as to get roots from the scions. In the fall take them up and bury them, re-setting the next spring a little deeper.—The very best time to graft apples and pears is on a warm day, just as the buds begin to swell.—Stocks and scions must be in good order—*the scion healthy and the stock thrifty.* The scions are better to be cut some days or weeks previous to setting. Waxing is one of the most important parts of grafting above ground, *especially in our climate.* The wax is made by melting and stirring together four parts rosin, one of tallow, and one, or one and a half of beeswax, to be spread while warm on rags, and these stripped up and wound around the graft, or applied by the hand after working thoroughly.

There are many modes of grafting, but two of which are in common use—Cleft grafting (*Fig.* 2) and Whip or Splice grafting, (*Fig.* 3,) which is mostly used on small trees, as with us. *Fig.* 1 is a representation of what is called Saddle grafting, which, though not much used, and slower than the others, we are inclined to think favorably of, as possessing greater hardihood under unfavorable circumstances, than whip grafting. Explanation we think unnecessary, save to state, that the inner bark of the stock and scion should always meet.

Below is a description of the mode of grafting the peach, from our amateur friend and correspondent, Mr. Mathews, of Burlington. Being comparatively new, and particularly applicable to the peach and cherry, we feel much indebted to him for thus presenting it.

Fig. 1. *Fig.* 2. *Fig.* 3.

Figure 1, the stock prepared for inserting the graft.

Figure 2, the graft with slope in the end.

Figure 3, the work finished and ready for waxing.

MR. EDITOR.—Believing that a knowledge of the following method of grafting may be of service to

some of the readers of the Farmer, I have thought proper to offer a sketch of it for publication.

In the first place, saw the stock off at the hight you wish to graft, and pare the end smooth and even, then with a sharp, thin-edged knife, slit the bark perpendicularly down from the top about an inch, then take the graft and cut off the lower end sloping so that the slope will be of the same length as the slit in the bark of the stock, you then with your knife start the bark a little on each side at the top of the slit, and enter your graft and push it down to the bottom, wax it over and bind it up in the same manner that you would in cleft grafting.

When the stock is large enough, I always insert two grafts, on opposite sides, and when high enough to form a head, I let them both grow.

This mode of grafting is only applicable when bark will part freely from the wood, the grafts should therefore be kept in a cool moist place until they are wanted for use.

The stock should not be much less than half an inch in diameter unless the grafts are very small.

I look upon this method of grafting as being particularly valuable for the peach and cherry, which frequently fail when worked in any other way; it is also applicable to other fruits. The peach and cherry will bear to be, and should be grafted two or three weeks earlier than the apple.

I have grafted the Cherry, Peach, Plum, Pear, and apple in this manner, invariably with good success; better I think than by working them in any other way.

I herewith send you a rude sketch, although I consider it hardly necessary, as I think the above description will be found sufficiently explicit.

Yours,

D. Mathews.

Raising Quinces.

A correspondent of the Horticulturist, who raises this fruit of extraordinary excellence, pursues the following course: He selects good, deep, dry, rich soil, which is deepened by a thorough use of the subsoil plow, and manure applied copiously and deeply, by dropping it in the bottom of each furrow as the plowing proceeds. Large and deep holes are dug for the trees; each receives half a barrel of good compost; the branches are shortened onehalf, before setting, and the soil well settled among the roots by drenching with water before the hole is quite filled.

The pruning is given in autumn, and consists of cutting out, as sparingly as possible, and only old, crooked, crowded and decayed branches. Every autumn, manure is spread round each tree, and after a light plowing in spring, salt is spread broadcast at the rate of ten bushels per acre. The salt is regarded of very great consequence, but it must be applied in connexion with free manuring every year. The ground is kept mellow and clean by constant cultivation, potatoes, sugar beets, &c., being found well adapted to the purpose. The principal secret of success, it will thus be perceived, consists in cultivating and doing everything in the best manner; while others, who do not succeed, do not cultivate their trees at all.

The writer states that a good crop of quincies may be obtained three years after transplanting, and the trees will continue in a productive state thirty years.

The Proper Time for Pruning.

A correspondent makes some inquiries relative to the proper time for pruning apple trees, and remarks it has been the general practice to prune in the spring. Very small limbs may be safely cut off at any season whenever it is convenient; and when the trees have proper care and attention, it will seldom be necessary to remove any large limbs. But there are many trees which have been badly neglected, and large decaying and profitless limbs should now be removed from them; and where this is necessary, the fall is a more suitable time than the spring, for the reason that the wounds made in autumn will remain dry aud sound for years, and until the bark closes over them, while wounds made in spring turn black and decay, leaving holes which frequently ruin the tree. Mr. Cole, the anthor of the American Fruit Book, prefers October, November or even December, to the spring, which he says is the worst season. "Thirty-two years ago, in September," he remarks, "we cut a very large branch from an apple tree, on account of injury by a gale.—The tree was old, and it has never healed over; but it is now sound, and almost as hard as horn, and the tree perfectly sound around it. A few years before and after, large limbs were cut from the same tree in spring; and where they were cut off the tree has rotted, so that a quart measure may be put into the cavity. [Maine Farmer.

Low Headed Fruit Trees.

By having low headed fruit trees, the sun which is, perhaps, in our hot and dry summers, the cause of more disease and destruction in fruit trees than all other diseases together, is kept from almost scalding the sap, as it does in long, naked trunks and limbs.

The limbs and leaves of a tree should always effectually shade the trunk and keep it cool. The leaves only should have plenty of sun and light; they bear and profit by it. If trees were suffered to branch out low, say within one or two feet of the ground, we should hear very much less of "fire blight," "frozen sap blight," black spots, and the like. The ground is always looser, moister, and cooler, under a low-branching tree than under a high one. Grass and weeds do not grow a hundredth part so rank and readily, and mulching becomes unnecessary. The wind has not half the power to rack, and twist, and break the tree, and shake off the fruit—a matter of no inconsiderable consequence.—The trees will be much longer lived, and more prolific, beautiful and profitable. The trees are more easily rid of destructive insects, the fruit is much less damaged by falling, and the facilities for gathering it are much greater; there is less danger in climbing, and less of breaking limbs. The trees require less pruning, and scraping, and washing; and the roots are protected from the plow, which is too often made to tear and mutilate them.

[Exchange.

Medical Qualities of the Grape.

The New York Commercial, in an article on the grape, says this fruit is one of the best and most wholesome medicines. This affords an additional inducement for the culture of this popular fruit. The Commercial says:

"In the vineyard districts of France, Spain and other vine-growing countries, the medicinial properties of the grape are well known and highly prized. The free use of this fruit, as we are advised, has a most salutary effect upon the animal system, diluting the blood, removing obstructions in the liver, kidneys, spleen, and other important organs, giving a healthy tone and vigor to the circulation, and generally augmenting the strength of the entire animal economy. In diseases of the liver and especially in the moister compound afflictions, dyspepsia, the salutary and potent influence of a 'grape diet' is well known in France. The inhabitants of the vineyard districts are never afflicted with these diseases; which fact, however, alone would not be conclusive evidence of the medical qualities of the fruit of which they freely partake, since peasant life is rarely marred with this class of ailments; but hundreds who are thus afflicted yearly, resort to the vineyard districts for what is known as the 'grape cure,' and the result proves to be a cure, except in very long, protracted, and inveterate cases, which are beyond the reach of medical remedies. The invigorating influence of the ripe grape, freely eaten, upon the feeble and debilitated, is very apparent, supplying vigor and the rose hue of health in the stead of weakness and pallor, and this by its diluting property, which enables the blood to circulate in the remoter vessels of the skin, which before received only the serous or watery particles.

"In these remarks, however, we must be understood as speaking of the fruit when perfectly ripe. Unripe grapes, like all unripe fruits, are detrimental to health, and derange the digestive organs, and those depending upon, and sympathizing with them."

Economy of Fruit.

Every man of family who keeps a good supply of stewing and baking apples, of his own raising, saves a great many hard earned dollars yearly, otherwise to be paid to the miller or butcher. Or if he raises his own grain and meat, an equal amount is thus reserved for market. Then what a valuable addition to the comfort, variety and luxury of the table! By the first of summer, the thick trusses of strawberries begin to redden in the sun; and half a dozen quarts of this melting crimson fruit may be had each day for the table, from as many half-rod beds. Cherries, currants and raspberries, continue through the first half of summer, followed by early juicy apples, rich bloom-dusted plums, golden perfumed apricots, and buttery and melting pears.

Now, we do not say, as some mistakenly remark, that this fine and delicious supply costs nothing after the trees are planted; for good fruit cannot be relied on unless the ground is well cultivated and manured. But it does not cost half as much to cultivate an acre of fruit as an acre of potatoes or corn; while the amount obtained is greater than either; and all ready for the table without going through the process which the grain crop requires, of threshing and winnowing, and grinding, and kneading and baking.

By planting rich, high-flavored apples for stewing and for pies, instead of poor and insipid ones, each family may save from 50 to 200 pounds of sugar annually, in sweetening and spices. A friend of ours finds it cheaper to buy good fall pippins for fifty cents a bushel, than poor sorts sold as "cooking apples," for fifteen cents a bushel. He uses the Talman Sweeting largely, for baking and for puddings, and thinks that an Indian apple pudding, made by this natural sweetening, the cheapest and the best pudding in the world. He saves from $75 to $100 annually in the cost of his table by this fruit.

[Exchange.

Siberian Crab Hedges.

I saw not long ago a hedge, which was made by planting the seeds of the Siberian Crab—a small ornamental variety of the apple which is well known in the nurseries, and sought after for its little fruit. It naturally is a small one, and has not exactly thorns, but branches which become somewhat thorny and resisting. It naturally forms a thicket with a good many branches, so that it takes and keeps the hedge form very easily. He sowed the seeds of these crabs in the garden, and when the seedlings were a year old he transplanted them into a row where they were to grow as a hedge. They were set six inches apart, in a single row and the tops were cut off within three or four inches of the ground, the same spring they were planted. They made a fine growth, and the next spring were again cut down to within six inches of the ground. This made the hedge bushy and thick at the bottom.

The hedge is now five years planted. It has attained its proper size, and having been regularly trimmed every spring has become one of the thickest and most impenetrable hedges I have ever seen. It requires trimming but once a year, and seems to me well able to take care of itself the rest of the time. Besides this it has a fine appearance in the spring, when it is covered with blossoms, and in the autumn when it begins to bear considerable fruit. Would not the Siberian Crab, or its seedlings, make a good farm fence?

[Horticulturist.

Special Manures for Apple Trees.

To get a good crop every year instead of every other year most old orchards require amendments. Let us see what they are:—First, as every 1000 lbs. of apples will contain 170 lbs. of organic matter, we must supply it, and that too, in a proper state; it must not be fermentable like stable manure, but well decomposed, and cool, like woods earth, decomposed muck, river deposits or chip manure, or well rotted spent tan, and to secure its perfect decomposition may we not compost with it the very materials which are contained as inorganic constituents of the wood, bark, leaves and fruit of the trees.

We require lime, soda and chlorine to form the fruit, and probably a still larger amount of these same ingredients for forming leaves, bark and wood; a sufficient quantity of all these may be had by slacking six bushels of buick lime with two bushels of common salt, dissolved in water, which will cause the mixture to change into chloride of lime, and carbonate of soda, being just what we require; and after this mixture is one month old, and has been turned a few times, we may add it to a cord of the before named muck and and our compost, and it is partly prepared.—What else will the compost require? Among other constituents, Phosphoric and Sulphuric acids; these we may get by dissolving bones, or bone-dust, or native phosphorate of lime, in sulphuric acid, and pouring the fluid on the compost; the only constituent now necessary to be added is Potash, and this can be most cheaply supplied by wood ashes, and our compost is complete; for the iron, Magnesia and Silica, are sufficiently plentiful in all soils, and the first two may be dispensed with altogether. When these are added to the compost a small quantity of stable or barn-yard manure may be added to it, or placed under it, to assist the thorough action by its heat, and with two turnings it is ready for use.

Now the cost of this compost is not half so great as an ordinary dressing of barn-yard manure, and for an apple orchard is worth a dozen dressings of the ordinary kinds. Open the grounds fairly by plowing and the orchard is ready at the surface. Next look to trees; are they properly trimmed? Is the bark clean and free from fungi? If not, get your rules for trimming from Downing's Fruit Trees of America, and wet the surface of the trees with a solution made of one lb. of Bleacher's No. 1 soda to one gallon of water; put it on with a boat-mop or a whitewash brush, and it will decompose all mosses and dead bark, and the growth of the tree will throw off all the loose and dead bark, leaving a clean surface: neither a tree nor a man can be healthy with a dirty skin.

When your orchard is thus prepared let the soil convert the amendments into apples, and do not raise heavy crops among the trees and at the same time hope to get full crops of apples—above all, beware of buckwheat, unless you intend to plow it under; if so, go ahead—anything to induce frequent plowing in orchards so as to advantage by atmospheric influence.

[Journal of Ag.

The Use of Fruit.—Instead of standing in any fear of a generous consumption of ripe fruits, we regard them as positively conducive to health. The very maladies commonly assumed to have their origin in the free use of apples, peaches, cherries, melons and wild berries, have been quite as prevalent if not equally destructive, in seasons of scarcity.—There are so many erroneous notions entertained of the bad effects of fruit, that it is quite time a counteracting impression should

be promulgated, having its foundation in common sense and based on the common observation of the intelligent. We have no patience in reading the endless rules to be observed in this particular department of physical comfort. No one, we imagine, ever lived longer or freer from the paroxisms of disease, by discarding the delicious fruits of the land in which he finds a home. On the contrary, they are necessary to the preservation of health, and are therefore caused to make their appearance at the very time when the condition of the body, operated upon by the deteriorating causes not always understood, requires their grateful, renovating influences.

[Boston Med. and Surg. Jour.

WONDERFUL RASPBERRY BUSH.—We noticed in September last, the reception of some raspberries, from a second crop on the same bush, raised by Mr. P. B. Phillips, of Cranston. He then stated that the third crop was growing on the bush. On Saturday last, he brought to our office some of the berries which he assures us are from the *fourth set of blossoms during the present year!* The berries are not quite so large and rich flavored as those of the second crop, but they are about the average size and ripe. He says the bush stands in the open garden, but he takes considerable pains to keep it well cultivated, and the ground loose around it. It was taken wild from the woods, one year ago this month. Some parts of the bush have grown nine feet during the past season.

[Prov. Mirror, Nov. 10.

Wild Flowers.

How beautiful is the exquisite native grace of the flowers, seen in all their habits and positions! They know nothing of vanity, its trivial toils and triumphs! In unconscious, spontaneous beauty, they live their joy-giving lives, and yet how all but impossible to man to add to their perfection in a single point!—In their habits of growth, the innate grace may be particularly observed; there is a unity, a fitness, in the individual character of each plant to be traced most closely, not only in form, or leaf, and stem, but also in the position it chooses, and all the various accessaries of its brief existence. It is this that gives to the field and wood flowers a charm beyond those of the garden. Pass through the richest and most brilliant parterre in the country, with every advantage which labor, expense, science and thought can bestow, and you will find there is no one plant that is not shorn of some portion of its native grace, a penalty which it pays for the honors of culture. They are richer perhaps, more gorgeous, the effect of the whole is more striking, but singly, they are not so wholly beautiful. Go out in the months of May and June into the nearest fields and groves, and you shall see there a thousand sweet plants, sowed by the gracious hand of Providence, blooming amid the common grass, in crevices of rude rocks, beside the trickling springs, upon rough and shaggy banks, with a freedom and simple modest grace which must be the despair of gardeners, since quite inimitable by art, with all its cunning.

VEGETABLES IN CALIFORNIA.—A California letter writer says:

"A few days ago I sat down to dine with ten others, mostly adults. A large dish of potatoes graced the table, cut in pieces before boiling. Our landlady informed us that there were two potatoes in the dish, and no more. But there was enough and to spare. On another dish was one-third of a beet. Onions often exceed a pound in weight. A cabbage at the door of a resteraunt near me weighs twenty-eight pounds. These vegetables are not the result of forced culture. The soil, in many localities, cannot help producing them. Very little attention is paid to tillage, and no manure is employed. I am informed that some of the gardeners in this vicinity are applying manure, but I have not seen a load of the commodity in California.

Extract from an Address by Hon. J. R. Williams, before the St. Joseph County, (Michigan,) Agricultural Society, in October last.

"Horticulture is embraced as one of the objects of your association. It is too much neglected. While some pursue it intently as a passion, the many neglect it. Before urging this topic upon your attention, let me say, that if it will afford any encouragement, that I personally made a critical comparison of the fruits and vegetables exhibited at the recent State Fair at Rochester and Detroit and I could not avoid the conclusion, that the fruits of Michigan excelled those of New York, in beauty, health and perfection, though not perhaps in variety. The samples however in both cases were mostly exhibited by amateurs, and nursery men. They should have been poured out from every farm house. Many a man leaves a waste around his dwellings, when if he heeded the suggestions of interest, health, taste or comfort, he would surround himself with a garden or orchard. Fruit should be cultivated for profit. No expenditure will enhance the value of a farm so much in proportion to the outlay as the investment of an or-

chard. Fruit is a cheap luxury. The tree is growing while we are sleeping. Once planted, with trifling but continuous care, and the bestowal of odd hours, from time to time, the orchard rapidly increases. One prolific year pays the whole expense. I last year raised more than two hundred bushels of delicious fruit, apples, pears, plums, peaches, and grapes, in a garden of little more than an acre, which, six years before had hardly a cultivated tree of fruit upon it. You need not fear that the best of fruit will become a drug. The more abundant, the more certain the channels to market. Let me remind you that before all of our children are laid in the grave, cities which can be reached in twelve hours from any part of this country will have grown up containing half a million of inhabitants. and affording insatiable markets for fruit. We can be prepared to furnish these markets and enjoy the perpetual profit, or reject it. Fruit should be cultivated for health. Ripe fruit is nutritious, refreshing and highly conducive to health and longevity. In large cities during the prevalence of cholera, and at critical periods, fruit is forbidden, not so much because ripe fruit is deleterious, as because ship loads of fruit in great markets are gathered and transported before it is ripe. It is rendered palatable by incipient decay, and not delicious by mature ripeness. Hence there is an unpleasant acidity, a toughness and staleness in the pulp of much of the fruit sold in towns, which is not found in ripe fruit just plucked from the bough in your own garden with all the glow and flush and plumpness of life upon it.—From your own garden you can enjoy a cheap and delicious luxury, which a townsman cannot purchase at any price. The cultivation of fruit kindles a taste akin to a taste for the Fine Arts, is eminently conducive to refinement, and constantly prompts to the acquisition of varied, curious, and profoundly scientific knowledge, relative to the laws of decay, and growth, the preservation, propagation and development of vegetable life. It will render a home more beautiful, more genial, more attractive, an object I have just endeavored to enforce. What different ideas do we instinctively form of a country dotted all over with luxuriant orchards groaning under their abundance, and a country whose road sides present a dreary and sterile waste."

Age of Animals.—A bear rarely exceeds twenty years ; a dog lives twenty years ; a wolf twenty ; a fox fourteen or sixteen; lions are long lived—Pompey lived to the age of seventeen. Elephants have been known to live to the great age of 400 years. When Alexander the great had conquered Phoras, King of India he took a great elephant which had fought valiantly for the king, and named him Ajax dedicated him to the Sun, and let him go with this inscription, "Alexander the son of Jupiter, hath dedicated Ajax to the Sun." This elephant was found with this inscription 350 years afterwards. Pigs have been known to live to the age of thirty years; the rhinoceros to twenty. A horse has been known to live to the age of sixty-two, but averages twenty or thirty. Camels sometimes live to the age of one hundred. Stags are long lived. Sheep seldom exceed the age of ten. Cows live about fifteen years. Cuvier considers it probable that whales sometimes live one thousand years. Mr. Mallerton has the skeleton of a swan that attained the age of two hundred years. Pelicans are long lived. A tortoise has been known to live to the age of one hundred and seven.

Produce from a Single Grain of Wheat. —An experiment on the fertility of wheat has, during the past year, been carried out in the garden of Mr. Stowe, a surgeon at Buckingham, of which the following is a correct account. On the 13th of July, 1850, a single grain of wheat was sown in the garden ; the plant came up in ten days, and grew luxuriantly till the 24th of September ; it was then taken up and divided into slips, and replanted and suffered to remain till the 16th of April of the present year. The weather then becoming favourably wet, they were all taken up again and divided into no less than 114 plants, these being planted, were permitted to stand till the present month of August, when they were productive of the amazing number of 520 ears of wheat, many of them of full size, containing more than 50 grains of corn. The crop was gathered before it was fully ripened, as the birds attacked it in spite of revolving feathers and a protecting net.—Whether the result of this trial will strengthen the opinion of those who contend for the thin sowing of wheat in ordinary field cultivation, must be left to the judgment of more practical agriculturists, but of the amazing productiveness of the wheat plant, under such treatment, any one may easily satisfy himself by repeating the experiment.

[English Paper.

Improvement of Domestic Animals.

Few are aware how susceptible of improvement is the living machinery which elaborates *milk* for nearly every family in the union.—There is a reliable account in this report of a dairy of forty-one cows kept in the state of New York, which yields sixty-two dollars in

butter, cheese, and milk, as the product of each cow a year. From the returns of the last state census, it is safe to say that 1,100,000 cows are now milked in that state, which are supposed to yield about twenty dollars per head. To improve these up to an average annual product of thirty-one dollars each, (that is, to one half what the best large dairies in the country now yield,) would add $12,100,000 to the income of the citizens of a single state. This gain by the improvement of one kind of rural machinery would be equivalent to creating a capital of $200,000,000, and placing the money where it would yield over six per cent. interest in perpetuity. If the thirty millions of sheep in the United States gave as good returns in wool for the food consumed as the best 100,000 now do, it would add at least 60,000,000 pounds to the annual clip of this important staple.

In one of his letters to Sir John Sinclair, General Washington says, in substance, "that at the time he entered the public service in the war of the revolution, his flock (about 1000) clipped five pounds of wool per fleece. Seven years after, when he returned to his estate, his flock had so degenerated that it gave an average of only two and a half lbs. per head, which was the common yield of Virginia sheep then, as it is now."

Although the numerous importations of superior sheep, cattle, horses and swine, have greatly benefitted the country, it must be admitted that much has been lost by suffering improved animals to deteriorathe. Every wool-grower should ponder well this fact.—If two and a half pounds of wool will pay the whole cost of keeping a sheep a year, five lbs. will pay one hundred per cent. profit on that cost. Washington was eminently a "book-farmer," and was anxious to gain knowledge from the educated agriculturists of Europe and his own country. His overseer believed in keeping sheep as his father did, and was opposed to all innovation in husbandry.

There are now not far from 6,000,000 horses and mules in the United States; and it is not too much to say that, in a few generations, these animals may be improved full thirty dollars a head, on an average. If so, the gain by this increase of muscular power, and its greater durability, will be $180,000,000. If we study critically the machinery for converting grass, roots, and grain, into beef and pork, the difference is found to be more striking.—If the facts relating to this subject were spread before the people, great improvement would soon follow, and all classes share equally in the profits of more productive labor.

[Patent Office Report for 1849.

The First Ear of Corn.

You are probably aware that CORN, (Indian corn) is unknown in Paris. It is neither known as green corn, nor as sweet corn, nor as pop corn; as corn in the kearnel, or corn on the ear. It is rarely seen, even when ground into Indian meal. I speak of Paris and the neighborhood only; for I believe that it is cultivated in the South of France, to a limited extent, under the name of *mais*. I was, some weeks ago, at a dinner party, given by an American gentleman, at his chateau, in a suburb of Paris. Upon the table were green corn and sweet potatoes, results of perhaps the only efforts ever made to acclimate them here. As the corn was passed around, you might have distinguished the Americans from the French, by noting who accepted and who declined. The former were eager to renew an acquaintance long since interrupted, while the latter fought shy and kept the waiters at bay. It fell to my lot, however, to initiate into the mysteries of this novel vegetable a young French lady at my right hand. To her, the ear upon her plate was a revelation. Its shape was anomalous, its odor singular, and, moreover, the manner of eating it was barbarous.—Before attempting its demolition, many an unanswered inquiry passed through her bewildered little brain. Was the outside a mere rind, inclosing the pulp in the interior? Or was it nutriment to the core, and succulence to the center? Would the juice start forth, as from a ripe tomato, at the first immersion of the teeth? Might it not be poisonous, like the nightshade or the toadstool? By this time, her ear was ready, buttered, salted, and each row slit through the center. I flatter myself that the utter failure of the experiment can in no way be attributed to want of skill here. My pupil ate about half a double row, and then retired from the field, content with the laurels she had won, but perplexed by the cob, and sorely teased by the tissue-like-skin in which kernels were involved. The next day she was taken sick, and was compelled to keep her room. Anxious to prove to her that however lightly she might treat the offending vegetable, it was made, in former times the subject of thanksgiving to whole races and nations, I sent her an engraving from Mr. Catlin's frightful picture of a 'Chippewa Dance to thank the Great Spirit for Green Corn.'—She thought that to a spirit- that favored the growth and presided over the harvesting of such a product, just such a demonstration would be acceptable. The demoniacal orgies in which those Chippewas were indulging, could not be more fittingly introduced than at a Green Corn Festival." [Paris Cor.N.Y.Trib.

AGRICULTURAL MEETING.

At a meeting of the citizens of Jefferson and Dodge counties, held at the Planter's Hotel, in the village of Watertown, Feb. 18th, 1852, for the purpose of taking into consideration the propriety of forming an agricultural society, WALDO LYON, of Dodge county, was called to the chair, and J. A HADLEY, of Jefferson county, appointed secretary.

After a free interchange of sentiment by gentlemen present, it was, on motion of L. A. Cole,

Resolved, That we proceed to form a society to be known and designated as "The Jefferson and Dodge County Agricultural Society."

On motion of A. H. Atwater,

Resolved, That a committee of three be appointed by the chair to submit to this meeting a constitution for the government of said society.

The chair appointed as such committee, A. H. Atwater, W. M. Dennis and L. R. Cady.

The committee reported the following constitution, which was adopted:

CONSTITUTION OF THE JEFFERSON AND DODGE CO. AGRICULTURAL SOCIETY.

Section 1. The name of this society shall be "The Jefferson and Dodge County Agricultural Society."

Sec. 2. This society shall consist of such persons as shall subscribe to this constitution and pay on subscribing. one dollar, and one dollar annually thereafter; and the payment of ten dollars shall constitute a member for life, and shall exempt such member from annual contribution; and such honorary members as the society shall elect at its annual meetings. Each bona fide member to receive at the expence of the society an agricultural paper published in this state, subject only to postage.

Sec. 3. The officers of this society shall consist of a president, and as many vice presidents as there are organized towns within the counties, one to be located in each of the said towns; a secretary, a treasurer and an executive committee, to consist of the president, the secretary, the treasurer, and four additional members, a majority of whom shall constitute a quorum for the transaction of business.

Sec. 4. The president shall preside at all meetings of the society, unless necessarily prevented, in which case the vice presidents shall appoint one of their numbers for that purpose. The vice presidents are charged with the general interests of the society in the towns and wards in which they may respectively reside, to procure subscribers and donations; immediately remitting any funds which they may receive to the treasurer; and generally to act as agents of the society, and to constitute a medium of communication between the different members of the same. The secretary shall, when necessary for the interests, carry on a correspondence with other societies, with individuals, and with the vice presidents; shall keep a true record of all letters written by him, and a regular file of all communications received by him as secretary, and lay the same before the society at their annual meeting. The treasurer shall receive and keep the funds of the society, and disburse them on the order of the president, countersigned by the secretary; and shall make a report of the receipts and expenditures, at the annual meeting. The executive committee shall take charge of, and distribute or preserve (as they may think proper, all seeds, plants, books, models, &c., which may be transmitted to the society; and shall also have charge of all communications, reports, and other documents designed or calculated for publication, and so far as they may deem expedient, shall correct, arrange and publish the same in such manner as they shall think best calculated to promote the objects of the society. A majority of the executive committee shall have power to call extra meetings of the society, also to call meetings of their own body whenever the interests of the society require—shall make out the list of premiums which may be offered, and transact all business which may be committed to them by the by-laws or resolutions of the society.

Sec. 5. There shall be an annual meeting of the society on the 2d Wednesday of January in each year, at such place as the executive committee shall appoint—at which meeting all officers shall be elected, except the vice presidents; they shall be appointed by the executive committee.

Sec. 6. The society shall hold an annual cattle show and fair, alternately in Jefferson and Dodge counties, at such time and place as shall be designated by the executive committee, at which it shall be the duty of all the officers of the society to be present.

Sec. 7. The executive committee are authorised, if they deem it expedient, to cause this society to be made auxiliary to the State Agricultural Society, and also to apply to the legislature of the state for an act of incorporation.

Sec. 8. This constitution may be amended by a vote of two thirds of the members attending any annual meeting.

The meeting then proceeded to the election of officers of the society for the ensuing year, with the following result:

President—A. H. Atwater, Dodge co.
Secretary—J. A. Hadley, Jefferson co.
Treasurer—L. A. Cole, Jefferson co
Executive Committee—Wm. M. Dennis, and Benj. Fuller, of Dodge county, and Linus R. Cady and John Richards, of Jefferson county.

The executive committee appointed the following named persons as vice presidents:

JEFFERSON CO.

Aztalan—Albert Knight.
Concord—William Sacia.
Cold Spring—Jarvis K. Pike.
Farmington—D. M. Aspinwall.
Hebron—Jonas Folts.
Ixonia—Elisha R. Adams.
Jefferson—William Sanborn.
Lake Mills—Royal Tyler.
Milford—Mr. Clapp.
Oakland—Norman Horton.
Palmyra—Justus Carpenter.
Sullivan—Myron Smith.
Watertown—Daniel Janes.
Waterloo—Abram Vanderpoel.

DODGE COUNTY.

Ashipun—Francis McCormick.
Beaver Dam—S. L. Rose.
Burnett—Durkee Lyon.
Chester—D. L. Bancroft.
Clyman—Jacob Webber, 2d.
Calamus—Mr. Chapman.
Elba—Dudley Little.
Emmet—Henry Visger.
Fairfield—John W. Gray.
Hubbard—William H. Sullivan.

Herman—George Fox.
Hustisford—Ira Jones.
Le Roy—
Lomira—
Lowell—William H. Green.
Lebanon—Barnabas Nicholson.
Portland—Kendall P. Clark.
Rubicon—Prof. Leyman.
Shields—John Griffin.
Trenton—Mr. Hewett.
Theresa—Solomon Juneau.
Waushara—Benjamin Ferguson.
Williamstown—Alvin Foster.

The names of ten members were then enrolled.

On motion.

Resolved, That the proceedings of this meeting be published in the papers of Watertown, and the agricultural papers of the state.

On motion, the meeting adjourned.

WALDO LYON, Ch'n.

J. A. HADLEY, Sec'y.

SYRIAN PLOW—*A Curiosity.*—One of the greatest curiosities at the State Fair, was a plow, yoke and ox-goad, sent to this country from Mount Lebanon, sixty miles from Jerusalem, in the land of Syria, by the Rev. Daniel M. Wilson, one of the American board, and well known in Cincinnati. The implements are simple and rough, reminding one of the primitive ages, and were in striking contrast with the finished American specimens on exhibition. The Syrian plow-beam is composed of two round, crooked sticks, lapped and pinned together in the center with wooden pins. On one end is a straight, single handle, the lower end is round and brought to a point and widened out towards the top to eight or ten inches. The top of the handle has a short cross-piece. The yoke is made fast to the other end of the beam by a wooden ring, is nearly straight, and the bows are straight wooden pins a foot or so in length, which are tied together by a primitive looking cord pased under the neck of the ox. The whole establishment so rickety and weak that a Buckeye ox would rip it all to flinders at a jerk. The ox-goad is a stick like a short fish-pole, tipped with iron, chisel-shaped. [Indiana Farmer.

FORESTS AND STREAMS.—The remarkable man Humboldt has reduced it almost to a demonstration, that the streams of a country fail in proportion to the destruction of its timber. And, of course, if the streams fail our season will be worse; it must get drier in proportion. Every body knows, who can number twenty years back, that the watercourses have failed considerably, and that the seasons have been getting drier every year. Humboldt, speaking of the valley of Argua, Venzuela, says, the lake recedes as agriculture advances, until large plantations of sugar-cane, banana, and cotton-trees were established on its banks, which (banks,) year after year, were farther from them. After the separation of that province from Spain, and the decline of agriculture, amid the desolating wars which swept over this beautiful region, the process of clearing was arrested, the old lands grew up in trees with a rapidity common in the tropics, and in a few years the inhabitants were alarmed by a rise of the water, and the inundation of their plantations.

For the Wisconsin & Iowa Farmer.

MR. EDITOR.—In complying with your request of the 16th, I propose furnishing for the Farmer a series of brief *familiar* articles on those points of Natural History, particularly interesting to farmers and their families.

Natural History, (at least a part) is an important branch of *agricultural science* which has been hitherto grossly neglected. How often does the farmer, after all his toils and labor find his brightest hopes blasted by the insidious attacts of *insects*, the habits of which he is totally unacquainted, and consequently unable to suggest or apply successfully the proper remedy: And from this same *ignorance* springs that system of exterminating warfare waged against the feathered tribe; a warfare not only cruel in the extreme, but waged too often against his best friends—friends that spend their whole lives in one continual labor for his good, destroying countless myriads of insects and their larva, which, if left unmolested to multiply, would soon blast the entire vegetable kingdom.

The AUTHOR OF NATURE has established a beautiful and harmonious law, by which all animal creation is retained within due bounds. The principal active agent employed to keep the insect family in check, is the insectivorous tribe of birds. These gay, sprightly creatures ask nothing in return for their valuable services, but simply to be *left alone*—unmolested to follow the happy path marked out by the wonderful instinct of provident nature.

It will be a special object of these articles to instill into the young, a love for the beautiful objects of nature—to excite their sympathies in behalf of those sylvan jewels, that enliven our broad prairies, and shady groves, with sprightly motions, gay colors, and most melodious music.

P. R. HOY.

Racine, Feb. 13, 1852.

My first article will be on the HAWK FAMILY.

Fifty thousand dollars' worth of sponge has been gathered the past season at Key West and the greater part of it sent to France to be mixed with the finest Saxony wool in the manufacture of broadcloth. The lustre of the cloth thus made is said to be unsurpassed—and it has the strength of linen.

EDUCATIONAL.

CONDUCTED BY JAMES L. ENOS.

The important interests of the Free Schools of our commonwealth require some *advocate* to awaken the people to energetic and united action.—The active interest in the subject being as yet insufficient to warrant the publication of a journal devoted wholly to the cause; it has been thought best to devote a few pages of the Farmer each month to a brief elucidation of the most important topics pertaining to our school system; different modes of teaching—original plans for school houses to accommodate schools of all grades, &c.

In the course of the year a state convention of teachers will be held and the general subject of education will be affected by its acts. Various important reports will be had which should be preserved in a substantial form in the libraries of the various school districts, as an important part of the educational history of our state.—Teachers' Institutes, Normal Schools, and conventions in the various counties will form a basis for a vast amount of matter, too valuable to be lost.

District clerks are authorised to subscribe for periodicals for the district libraries, and have them bound at the end of the volume and placed as permanent volumes in their respective libraries.—This point we trust will not be forgotten by those officers.

We shall devote from four to five pages monthly to this department, and cordially invite teachers and all interested to aid in giving this paper a circulation among the friends of the cause. We promise our best efforts to make this branch of the Farmer what it ought to be, and refer you all, most respectfully, to the future numbers for evidence.

Permanence of Teachers.

From the almost universal practice of changing teachers at the end of every school term, we infer that the patrons of schools do not usually understand the many advantages to be derived from a long continuance of the same teacher in a school. We propose, from among others that might be named the following:

1st. The teacher and pupils become acquainted—the one with the wants of the scholar, the other with a peculiar manner of communicating knowledge.

2d. It enables teachers to adopt and pursue a systematic course of instruction, and thus keep the pupils in a continual line of progress.

3d. Uniformity of discipline and arrangement of study. No child can be well disciplined by being changed from one set of instructions to an other every three or six months.

A new instructor cannot know the state of a pupils mind nor his capacity to enter a particular study, and as he wishes to exhibit wonderful proofs of progress, he introduces his pupils into new studies, and new modes of study, and *pushes* them forward as fast as possible. He succeeds, however, only in getting them fairly under way, before his term expires and another comes in and takes his place with a new set of books—modes of imparting instruction, &c. The direct result of this course is to produce superficial scholars. Go into our schools and question a boy or girl of 12 as to his studies, "Have you studied Geography?"—"Yes, four years." "How far have you learned it?" "Only to South America." "Why have you been no farther?" Because every teacher puts me to the beginning."

"Have you studied Arithmetic?" "Yes, three winters." Question him, and very likely he can not explain a single general principle of numbers And so on in each of the other studies pursued in the schools.

Our Free Schools should have as regular a system of studies as they have in colleges or Normal schools; and when a pupil has mastered one subject he should be placed on the one next in order, and so on. This course can be pursued only with permanent teachers—and very little comparatively will ever be accomplished in our schools until such a course is adopted.

It is true some few in the district will be displeased with *any* teacher that does his duty, in a short time, and they will seek a change, which, when effected, satisfies only for a brief period—so that nothing is gained on this score. No teacher is perfect in all things, and parents should take hold and co-operate and endeavor to build up and perfect a good school, rather than tear down what they cannot build better.

School Houses.—In our next our readers may look for a model design of a school house to accommodate eighty pupils. The plans we shall present will be designed by *practical teachers* and may be relied upon as combining utility and convenience

☞ A Teacher's Normal institute for eastern Wisconsin, will be held in the village of Genesee Waukesha co., commencing on Monday, March 22nd, and continue in session two weeks in charge of James L. Enos, Graduate N. Y. State Normal School, as principal, assisted by a number of competent instructors. This is the third session and we predict a very large attendance of teachers. This is the only institution of the kind in the state, that has been so conducted as to become permanent, and demonstrate the usefulness of such institutions.

EDITOR'S TABLE.

ERRATA.—Feb. No, page 29, third paragraph and fourth line, read pap for pass.

The Wisconsin State Agricultural Fair is to be held at Milwaukee on the 6th, 7th and 8th days of October.

We are indebted to the Hon. JAMES D. DOTY for sundry public documents.

THE WORKING FARMER.—A monthly periodical, devoted to Agriculture, Horticulture, Floriculture, Kitchen Gardening, management of Hot Houses, Green Houses, etc., embracing Agricultural Chemistry, preparation of manures, &c., &c. Edited by Prof. James J. Mapes, and published by F. McCready at 25 Cliff St., New York.

Single copies, $1,00, 6 copies. 5,00; 25 copies, 20,00. Back volumes, in covers, at subscription prices.

The 4th volume will commence March 1st, 1852.

FRUIT TREES.—We would invite the attention of all who are in want of fruit trees for transplanting this spring, to the advertisement of Mr. BELL, found in another column. Mr. BELL commenced his nursery on Gardner's Prairie some fifteen years ago and we believe is one, if not *the*, oldest nurserymen in the state. Give him a call. It is of the utmost importance to the purchaser, planting out an orchard to obtain fruit trees, that will not belie their labels when they arrive at a fruiting age. We say to all, who would obtain reliable trees, go to well established nurseries, conducted by men who understand their profession and have a reputation at stake.

We protest against patronizing itinerant tree pedlers. Numerous instances have come under our observation, where purchasers of trees from pedlers, have been grossly imposed upon; and who, after waiting from three to five years, only were able to detect the fraud. We have nurseries enough in Wisconsin and Illinois, to supply the demand for these states. At Gardner's Prairie, Delevan, Racine, Aztalan and Wyocena may be found large and well conducted establishments. At Northfield in Northern Illinois, are the extensive nurseries of Dr. J. A. KENNICOTT, who is now disposing of a large stock of trees, shrubs, plants, &c., at very low prices. No man understands the business better than Dr. KENNICOTT, or has done more to encourage the cultivation of fruit in the west. Give him a call!

AGRICULTURAL INSTRUCTION.—We are gratified to learn that an agricultural department has been established in the Western Reserve College, located at Hudson, Ohio. A course of instruction in agriculture adapted to the practical wants of farmers, was commenced on the 5th of February, consisting of recitations and lectures on agricultural Chemistry, Geology, and the natural history of plants and of insects destructive to vegetation. Instruction will be given to a class in the practical analysis of soils and of plants.

With the exception of Yale College, this is the only practical movement, within our knowledge, that has ever been made in any college in this country, to give instruction in agriculture. This is a subject of vast importance, to three-fourths of the entire population of the U. States, and we hope the day is not far distant, when not only in every college, but in every other institution of learning, of every grade, from the first class academy down to the primary school, instruction in agriculture will stand pre-eminent.

We have received the Feb. No, of the Am. Veterinary Journal, a monthly, published in octavo form, containing thirty-two pages and edited by George H. Dadd, M. D., No. 1 and 2. Haymarket Square, Boston, Mass., to whom all orders must be addressed. We judge by the No. before us that it is an admirable work and one which should be in the hands of every farmer. We trust it will receive the liberal patronage it so richly deserves. Its subscription price is $1,00 only, and a single No. is worth that sum to any owner of a horse.

It will be observed that this number of the Farmer contains the first, of a series of articles on Natural History by Dr. HOY of Racine. And as this is a subject of great importance to agriculturists, and the Doctor one who is amply qualified to throw light upon it, inasmuch as he has given it much attention, for several years past, we bespeak for the series, a careful perusal by our readers.—The subjects will be illustrated with engravings. In the first volume of the Farmer, our old subscribers will remember the articles on the "Analysis of Soils" by the same author, as containing much practical instruction in a small compass.

We commence with this number an "Educational Department," under the editorial charge of James L. Enos, Esq., of Madison, which we think will add much to the usefulness of our paper.—But in making this *addition*, we do not propose to curtail the usual amount of agricultural matter, as we shall use a much smaller sized type, for the principal portion of our paper; consequently we shall be able to get more reading matter on a page.

NEW ENGLAND FARMER.—This valuable agricultural paper has been enlarged to 48 pages and is now published monthly instead of semi-monthly as heretofore. To our agricultural brethren in the west, who wish an eastern paper adapted to their calling, we say you cannot do better than to subscribe for the N. E. Farmer. By REYNOLDS & NOURSE, Boston; SIMEON BROWN, Editor. $1 00 a year.

For the Wisconsin & Iowa Farmer.

Letter from a Farmer's Wife.

MR. EDITOR.—Will you permit a farmer's wife to suggest what she thinks would be an *improvement* in the Wisconsin Farmer, inasmuch as it would render it an *assistant* to a greater number of its readers than it now is?

I, for one, have been a constant reader of your excellent journal, and one of its well-wishers from the first; but I must candidly say, that I have been somewhat disappointed in not finding more matters relating to *house-hold affairs*. Now, Mr. Editor, it does seem to me that it is *not* quite right, that this branch of the farming interest should be so much neglected by an agricultural paper.—True, you have occasionally given some good "recipes, &c., &c.," for which I would be duly grateful but these little items alone are *not enough* for those who have limited experience in house-hold management, and especially in the peculiar duties which devolve upon the farmer's wife. It seems to me, that a journal which comes into our families for the express purpose of elevating, and instructing the members of the family, should be so adapted in its "subject matter" as to reach the wants of all; and consequently I have waited patiently for the appearance of something applicable to my peculiar wants. And I did hope that with the new volume, now just commenced and its proposed improvements, I should see a *corner* devoted to the *house-hold*. The first number has arrived with its beautiful new dress and elegant title-page, still I have searched in vain for something to assist me, in my humble art of house-keeping. And so much disappointed do I feel, that I have concluded to run the risk of speaking to you about this matter. Perhaps you have never thought of the wants of this class of your readers or thought how much valuable instruction and material aid, you might convey to them, if you would open your columns to a discussion of those subjects, which relate to a skillful management of house-hold affairs. And, by the way, allow me to suggest the example of some agricultural papers in the older states, which have an ably conducted department under the charge of some competent female. Why can't you do as much for the benefit of Wisconsin? Have you not a wife, who might assist you in this matter as well as the wives of some other editors? If so, I beg you to enlist her services in the good cause of female elevation and improvement. I hope you will not think I wish to dictate, but it seems to me that with the facilities for information in the shape of a large list of exchanges and a good library, it would not be a great task for a woman of discernment to prepare matter for a monthly journal of this character. And moreover, I should hope that the whole labor of preparing artiles, would not fall upon the editress, but that some of the skillful and experienced house-keepers in our state, would lend their aid to enrich the columns of the "Ladie's Department" with an occasional chapter of their experience and success in some particular branch of domestic economy or comfort. Also those who are inexperienced or unsuccessful in their labors might by stating plainly the mode of procedure and the result of the same, suggest such subjects as will be useful and important to discuss in this department. Also, do not forget the "recipes," for some that you have given us have proved very useful. But I have already written twice as much as I intended when I commenced. After commending my subject to your favorable consideration I will close.

H. K.

Milwaukee Co., Wis, Jan. 25, 1852.

We accept the suggestion of our fair friend, and assure her and others, who have proposed a similar feature in the Farmr, that we are willing to open our columns for their *especial* benefit, at any time, when they will pledge their individual efforts to support the "department." And we have no doubt that our "better half" would consent to render some assistance in this branch, provided the ladies would co-operate with her. At any rate we "will try" the experiment in a future number. Meanwhile, we hope our correspondent will continue her favors; for one who wields the pen so well, should not allow her intellect to rest; for she has the *power* of doing much, to advance her sex in general intelligence, as well as in a knowledge of the house-hold arts.

COVERS.—For the want of suitable paper we are obliged to send out a part of our March no. without covers.

☞ We have not had time, as yet, to complete the reprinting of the January number.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., APRIL, 1852. NO. 4.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER,

TERMS:

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Five copies for $2, if directed to one Post Office. and at the same rate for a larger number. All subscriptions to commence with the volume. Back numbers supplied to new subscribers.

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OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

Gardening.

The soil will be in a condition to be actively worked during the present month; therefore, we wish to say a few words to our friends on the garden—a spot of all others, quite too much neglected by the mass of farmers. And they excuse themselves for this negligence by saying, they "have not time to attend to such small matters" But good friends, is it really a "small matter," for you to provide for the health, and comfort of your household? True, it requires industry and attention, to cultivate a garden successfully; but when we consider that *one* acre of land, appropriated to this purpose, if well cultivated, will yield as much profit, and *more* real luxuries, than any other *eight* acres on the farm—does it not prove that the time and labor are judiciously expended? It is not for profit in dollars and cents, that we plead, as much, as, for the increase of table luxuries, your labor will procure yourselves and families. "After the winter's diet of solid, and usually salt animal food, the human constitution requires the detergent effects of a vegetable and fruit diet; and as a general rule, no one can safely dispense with it. Again the natural appetite craves such food and it, *unlike* some other cravings, may be safely and beneficially indulged." There is no reason but simple negligence why, the farmer's table should not be well supplied with every kind of small fruit and good kitchen vegetables in their proper season. Neatness should characterize the arrangement of your garden, and good management will, generally insure every vegetable that is wholesome for human food, at an early season, and in a good degree of perfection.

Procure the best seeds! for on this point, depends much of your success. For instance, some kinds of Peas produce three times as much as others, and some kinds are ten times as delicious as others. So it is, through the whole catalogue of garden vegetables. In all cases where any importance is attached to the result, the plumpest and heaviest seeds should be selected, if you wish a vigorous growth in the plant or seedling.

To prove seeds.—Plant some in a box of warm earth. Seeds with hard shells, should be soaked in tepid water from 24 to 48 hours. It is said that onion seeds may be proved by tying in a cloth, and laid in cold water, and the temperature of the water raised to a boiling point. If good, they will sprout in half an hour. Some vegetables are benefitted by being transplanted, while others cannot be removed without serious injury. Those with milky juices are most difficult to transfer. Small seeds should be sown shallow, in fine earth pressed down tightly with a spade or board, so that the earth, may come in contact with the seeds and the little rootlets find immediate support.

It is said that cabbages may be preserved from *cut worms*, by planting them at the bottom of a trench 5 or 6 inches deep. The Working Farmer says "Light seeds which are liable to be destroyed by the suns heat or from too deep planting, like the carrot, parsnip, &c., should be rolled so that each seed may be touched in all its parts by the soil, and be thus prevented from baking. Many weeds about coming through the soil are destroyed by the roller from the breaking of their crowns by the pressure downwards of their upright stems and many crowns are freed from their roots. Soi when compressed on the immediate surface, does not harbor insects as when left unrolled."

THE PEAR ON THE THORN.—On the thorn, pears come very early into bearing, continue prolific, and, in respect to soil will thrive well on a strong clay, which is unsuitable both to those on quinces and wildlings; and the grafts or buds require to be inserted very low that the moisture of the earth may tend to favor the swelling or enlargement of the diameter of the stock, which does not increase proportionally to, nor ever attains the same size as the stem of the pear. For raising grafting stocks, the seeds of the wild pear should be employed, the produce being hardy. Those on wildlings grow less rapidly, but are deemed more du-

rable, and they will thrive on the poorest soil, if a hardy variety and not over pruned. [Enc. Gar.

Gleanings for April.

Sow seeds for early radishes, lettuce, tomatoes, celery, spinach, cauliflowers and egg plant in a hot bed. Oiled cotton cloth stretched on frames answers a very good purpose and is procured at a trifling expense compared with glass. After the danger of frost has passed transplant to perma nent beds.

Parsnips, carrot and beet seeds should be drilled in as soon as the frost is out of the ground. A few rows of each of these vegetables, will supply a family for early use, if the soil is *rich* and *deep.*

Peas.—A few rows of this hardy vegetable, should be sowed as soon as the frost is well out of the ground; as they are not liable to injury by frost after they come up. Early peas should *not* be soaked before sowing. Seeds of the same *genus* should not be sown very near to each other as this causes them to degenerate. This remark applies to the gourd tribe, as melons, squashes, pumpkins, &c., and to different varieties of corn, turnips and various other seeds.

Many vegetables should not be planted in the same spot two years in succession.

If your land is clayey, let it alone while wet, for working it then, will do more harm than good, by causing it to become lumpy.

Delicate seeds, as the onion, &c., if sown on clayey or tenacious soils, will do better to be covered in the drill, by well pulverised loam and sand. It is said, that the onion bed should not be changed, as they do better a succession of years on the same bed.

A Vegetable Curiosity—*A Squash Crawling through a Knot-hole.*—Mr. Alpheus Bailey, of Westbrook, raised a curious squash the past season. There is a portion of the squash on each side of a piece of board, and the two parts are connected through a knot-hole, through which the squash grew. It would appear that the vine met the board, and the blossom formed just by the hole, and the squash grew through it—a part being on each side of the board, the larger portion being on that side most remote from the stem. The small connection through the hole gives the squash a very curious appearance. It is of very fair size, and looks as if the squeezing process to which it was subjected had done it no material injury.

[Portland Adv.

Large Premiums.

We are indebted to B. P. Johnson, Esq., Corresponding Secretary of the N. Y. State Ag. Society, for a copy of its premium list for the current year Among the liberal premiums offered, we notice one of a "Silver cup valued at $100 (or money if preferred,) for the best experiment made in that state in the preparation of flax, with a view to its substitution and use in the place of cotton." As this is a subject which is exciting more attention at the present time, than almost any other, it is probable that this generous premium will create a spirit of emulation, which will elicit some valuable facts.

The premium for the best experiment in cultivating the potato, with its *conditions*, as it is *not confined* to experiments in N. Y. State, we publish entire, that if any of our readers, are disposed to enter the field as competitors for the honor and profit, they may understand the terms, on which the premiums will be allowed. It is to be hoped that some valuable information in regard to this vegetable may result from the variety of experiments which will probably be made in its treatment. The society offer,

For the best experiment in the cultivation of potatoes, embracing answers to the questions which are annexed, the sum of $125
Second best, 75
Third best, 50

Report to be made at the annual meeting in 1854.

The following are the questions to which the attention of competitors is solicited:

First. What is the difference in the yield of the potato, and in the effect of the disease, upon early, upon medium and upon late planting?

Second. What such difference upon different varieties of soil? describing the varieties.

Third. What is the difference between planting the large, the medium and small potatoes, the quantities of seed used in each case; and the difference between planting the large seed whole or cut; state the size of the pieces planted when cut?

Fourth. What is the difference in the use of different kinds of manure ordinarily used, to wit, long manure, so called, and rotted or composted manure; what the difference when plowed under or spread upon the surface and mixed with the harrow, and when put in the hill; and what the difference when used before planting or afterwards? And the difference between such manures and that from the hog pen?

Fifth. What is the effect of using plaster in the hill before planting and after the plant is up?

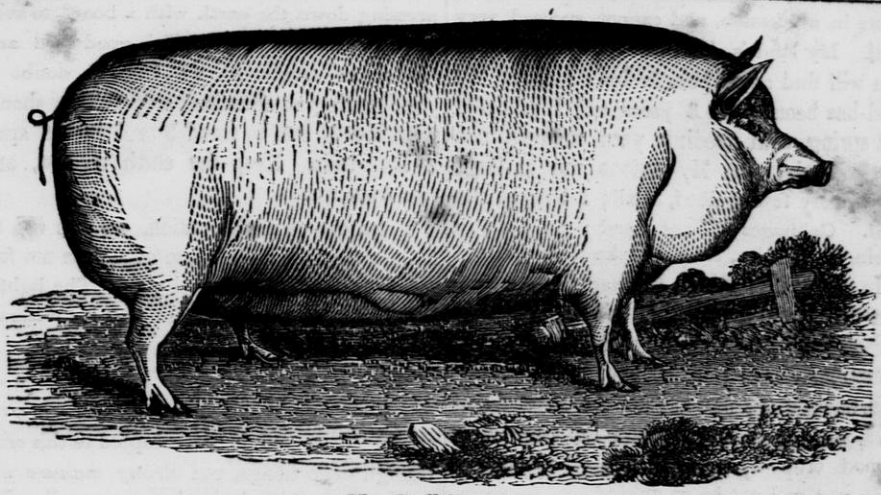
Sixth. What is the effect of lime used in the same way?

Seventh. What that of ashes, caustic or leached, applied in similar manner?

Eighth. What that of guano, and the quantity used, or that of its kindred, the manure from poultry.

These experiments should be made side and side, on the same soil, and on different soils, with the same plowing and tillage; weighing seed and weighing crop, and weighing also the discarded part of the crop, if any, and computing the per cent in each case.

There are more than ten thousand acres of land in the vicinity of Cincinnati devoted to the culture of Catawba grapes. So says an exchange.



The Suffolk Pig.

The Suffolk breed of hogs is comparatively of recent introduction into this country, so they are not generally known except by reputation. Their fair fame seems to be pretty well spread over the country. It seems to be the general opinion of those who have kept this breed that they produce more pork, in proportion to the food they consume, than any other race, and they are said to be less dainty or squeamish about their food than other hogs generally.

The pork of the Suffolk breed is of a superior quality, being firm, remarkably sweet and tender; and the high estimation of its quality is evinced by its usually selling in the market two cents higher on the pound than common pork. The lard is also excellent, being very white and firm.

These hogs are short, and round; the head, legs and tail very small, so are the bones.—Dealers in the market who are acquainted with this breed, say that a hog that weighs 400 lbs. will make 50 lbs. more pork for the barrel than common pork. They have less rough pork than usual. The skin of this race is so thin that the blood veins appear distinctly through it. Notwithstanding the legs of the Suffolk pig are so very small, yet they do not loose the use of them on becoming very fat, as is the case with some other breeds.

One important recommendation of this race is that they are remarkably quiet and peaceable, perfectly free from that savage and malicious disposition that often characterizes the hog, and makes the very term a reproach.

Last winter Mr. J. L. Lovering, of Hartford, Vt., brought to this market one of the finest lots of Suffolk pork ever offered here. Some of the hogs weighed 400 lbs., and some pigs only 8 or 10 months old weighed 300 lbs.—It was sold at an extra price, and we purchased some of it, and have not grudged the extra cost, as it is more than compensated by the superior quality.

Some complain that this breed has not sufficient size, but we think it is sufficiently large for profit. The pork is very thick even on the sides, so that there is no difficulty in this respect, even in pigs of moderate size.

Such is the general character of the Suffolk pigs by those who know them well; and those who have bought them, converted them into pork, and consumed it, and now have no interest in the sale of pigs or pork, give the same favorable account of them. We are aware that our statement is a high commendation of this race, and we hope that they will sustain their high reputation, as they will be a great improvement, and an important advantage not only to the agricultural community, but to the consumers of pork generally. But in order to maintain their character, breeders must not sell every runt or refuse pig, for such there will be in all races, occasionally, for breeders, but they should sell for this purpose none but the best. Bad management in breeding, and the sale of poorer animals to propagate from, will bring the finest animals into disrepute.

[N. E. Farmer.

For the Wisconsin & Iowa Farmer.

Onions, Cabbages and Turnips.

Mr. Editor—Will you please give me some information respecting the cultivation of onions, cabbages and turnips. I have tried 2

years in succession, and cannot succeed very well. My land is rich upland prairie, such as you will find any where in Iowa county. My land has been broke 3 years, and I manured last spring with feeding yard manure, and pretty freely, to. My onions ran to large necks, very few bulbed, a tall; I bought the seed. Cabbages did not head ; no fault in hoeing. Turnips, cannot make them grow.

In asking the Prairie Farmer for information such as this, he refers to volumes years ago, and says, "our friend will find the necessary information in—" such a volume.—You know every one has not the silver dollar always at his command, and he might lose a good crop by the editor's selfishness. I hope you will not be so unkind.

EDWARD PHILLIPS.

Mineral Point.

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REMARKS—A rich sandy loam is best adapted to the onion, but they will grow well in any good soil kept mellow and well manured. Stable manure taken from the barnyard in the fall and allowed to lie in the heap during the winter—thoroughly worked and pulverised in the spring with ashes added thereto, makes the best fertilizer we know of, not only for the onion but for every other garden vegetable in common cultivation. We have seen it used, year after year, with the most satisfactory results. If it is desired to stimulate a vigorous growth, beyond what this can do, the application of a preparation of hen manure, by pulverising it with ashes and loam or plaster, or a dressing of plaster alone, will most likely produce the desired effect.—So far as our experience goes, we would rather run the risk of a crop without manuring at all, than to use coarse, green manure, made the previous winter.

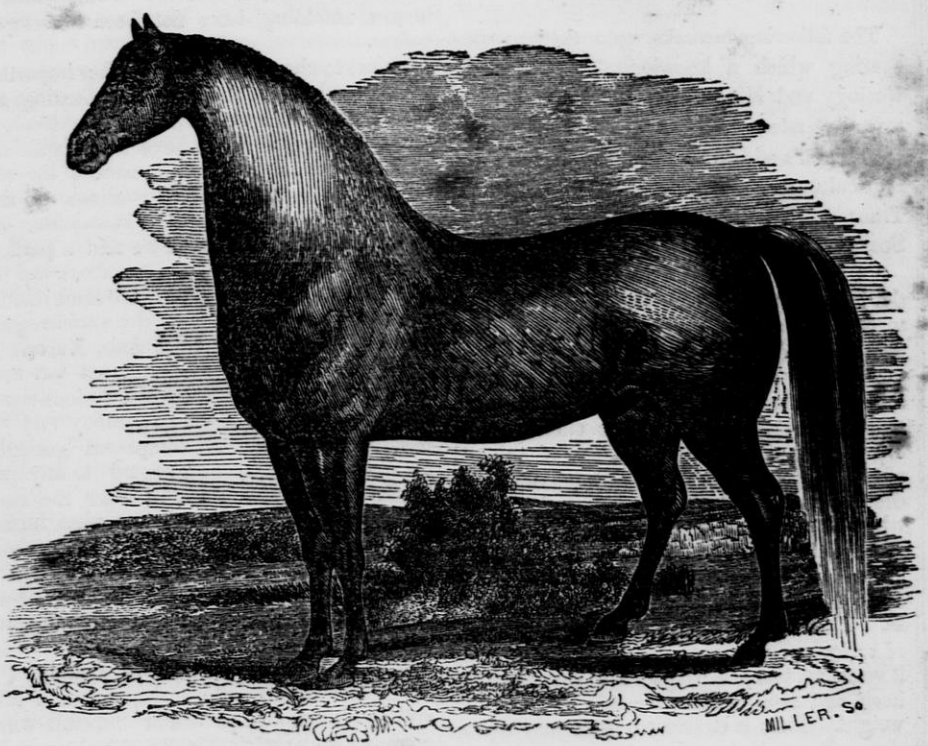
A covering of dry straw, ten or twelve inches thick, evenly spread over the surface of the onion bed, and burnt just before sowing the seed, is an excellent application. By this method the earth is slightly burned, the soil warmed, the weeds extirpated, and an excellent dressing equally applied. After burning, slightly rake over the ground and sow your seed in drills, about half an inch deep, lightly pressing down the earth with a board, to keep it firm about the seed. With good seed and the above treatment, we have no doubt of your getting an abundant crop. They should be thinned out, to stand 3 or 4 inches apart in the drills. Keep the earth mellow, and free from weeds.

From our own observation, we are led to believe that the main cause of onions not forming bulbs, is, too deep sowing. The lighter the seed can be covered and have it germinate the better.

Good cabbage cannot be raised except on *heavily manured* and *well tilled* land—heavy, strong loamy land, is best adapted to this crop, though deep tillage, and *strong manure* will produce good heads, in almost any soil. For Turnips, the same remarks as to soil, and manure, will apply. You cannot get the earth *too rich*, and well rotted stable manure, is the best, if we except the more costly applications such as bone-dust, plaster, &c. Soaking the seeds in sulphur water—1 oz. to a pint of water — is useful in preventing the ravages of the black fly. Ashes or lime is useful to sprinkle over the tops, when the dew is on, to check the depredations of insects. The seed should be sowed on fresh plowed ground, because the seed germinates more speedily on a moist furrow, and is consequently less liable to the attacks of insects. The finest flavored roots are obtained from new ground. No two kinds of turnips should be sown near together.

Mr. J. H. Russell of Marblehead writes to the New England Farmer that he believes the cause of the disease in potatoes is degeneration in the seed, occasioned by quick and powerful manures. He thinks pure seed may be obtained from the southwest part of Newfoundland, and that if such seed were planted on land that had not been manured, the trouble would soon cease. He says that according to his experience and observation, all other vegetables decay sooner now than they did twenty-five years ago.

AGRICULTURAL EXHIBITIONS—*In what way are they useful?*—Their value is to be measured not by the number of people in attendance, nor yet by the number of things exhibited; but by the new facts and valuable addition they bring to the stock of agricultural knowledge.



Hambletonian.

Above we give a correct portrait of the stud horse Hambletonian, owned by R. M. Wheeler of this place. He is a Blood Bay, 17 hands high, 8 years old and weighs about fourteen hundred pounds. He drew the first prize at the fair of the Wisconsin State Agricultural Society held in 1851.

For the pedigree of Hambletonian, the reader is referred to the following letter addressed to Mr. Wheeler soon after the horse came into his possession:

SHELBURN, Vt., Aug. 30, 1850.

R. M. WHEELER:

Dear Sir—I hasten in answer to your request to furnish you with the pedigree of your horse so far as relates to his sire, which I have carefully gathered, for a number of years. It is so difficult to trace the pedigree of stock after it arrives from foreign countries, (on both sides,) that I shall only give you the descent on the side of the sire. Yet your horse shows some points superior to his sire as regards *bone and sinew* which no doubt are acquired through his dam, Messenger Kate. Your horse descended as follows: 1700, Darley's Arabian; 1717 Bartlet's Childers; 1732, Squirt; 1750, Marsk; 1764, Eclipse; 1775, King Fungus; 1803, White Lock; 1814, Black Lock; 1826, Voltaire; 1835, Imported Hambletonian; 1843, Young Hambletonian, out of a mare by Brutus, that I purchased in Boston, Mass. The dam of your horse is Messenger Kate; well known in these parts for her great speed and strength. Up to this time, there has only one horse half brother to yours been put in thorough training which resulted in the following manner. In private, while green, he trotted his mile in 2.40—was sold for $500, taken to Boston by Mr. Benton, and after a thorough training, accomplished his mile in 2.26, was then sold for $3000. I could give you lots of intelligence as to their speed, but, your horse cannot help but speak for himself. Wishing you success,

I am, Dear Sir,

Your's Truly,

USUAL PARSONS.

Agricultural Chemistry.

The following remarks, upon the important bearing which a knowledge of Chemistry, Geology and Mineralogy, has upon agriculture, we select from an abstract of Professor Norton's address, before the Ontario Co. Agricultural Society, and published in the Transactions of the N. Y. State Agricultural Society.

"Chemistry is, as it seems to me, clearly the leading science connected with agriculture. This science has, in numerous departments, already effected so much for the benefit of the practical man, that I am almost at a loss in endeavoring to select some instances of its usefulness. Its province embraces the composition of the soil, of plants, of animals, of the atmosphere, and of water, together with the study of the changes and transformations which are continually going on among them.

By chemical analysis, we are able to separate and estimate the various substances, which compose any of the bodies that we see around us. Thus we can take the soil, and by means of various processes we can not only find what it contains, but can weigh each substance by itself, and ascertain its proportion to the whole weight. Here is clearly an important operation. By analyzing a number of very fertile soils, and of very barren ones, we are able to perceive what are the differences between them. This evidently enables us to decide by what course the barren soil may be most easily and economically improved.

"We can also analyze the plant, and ascertain the nature of its connexion with the earth —by comparing its compositions, and that of any given soil, we can say what the soil needs, to make it grow any particular crop, and add it in the cheapest form. The same plan may be pursued with the animal; having determined by means of analysis the composition of its various parts, we can decide what food is most valuable for special purposes. We can also, by the same means, pronounce upon the value of manures, so as to say with perfect certainty, which is most valuable, and what will be its peculiar effects.

"These are all fields of evident importance, in fact they can scarcely be over-estimated, and yet they embrace only a part of what would be the advantage to himself, of knowing with certainty the composition of his soil, of his crops, his animals, and manures, and he will not venture to assert that chemistry is unimportant in its applications to his profession; it is in fact the key to it all, and we only wonder how farmers have ever been content without it, and that the truths which it is now unfolding, have not been developed before.

"Next to chemistry, are two other important sciences, which in their practical bearings are closely connected with it: these are Geology and Mineralogy. They have to do with the rocks and minerals which constitute the surface of the earth. Geology shows us that the rocks occur in regular succession, one above another. So that if we find a particular rock between two others, one above and the other below, that rock will be in the same relative position when we find it on the surface again, whether this be in America, Asia, Europe or Africa. Geologists have different but very certain ways of recognizing the various strata, and hence are able to decide many very important questions. A competent geologist, for instance, can say with regard to any particular point in this state, whether the rocks which contain the saline springs that furnish such immense quantities of brine at Syracuse, and elsewhere, are to be found below by boring, and at about what depth; or can tell whether shafts for coal, may be sunk with any prospect of success.

"Such is the province of Geology; it names and classifies the rocks, and then Mineralogy selects the particular minerals which compose each rock. Finally, chemistry comes in again, and ascertains what are the constituents of these minerals. The soil is formed by the gradual crumbling down and decay of the various rocks, hence if we know the composition of these by the foregoing means, we can evidently say with confidence, what will be the general character of the soils derived from them. Such knowledge is clearly of much advantage in surveying, and determining the value of a country. By means of it, maps are made, which may serve as useful general guides to the settler. A person acquainted with the subject, can make up his mind almost at once, as to the properties, excellences, or probable deficiences of any tract of land."

Discovery in the Management of Bees.

It has hitherto been regarded as a well established fact, that bees require the light to be carefully excluded from their habitation.

The Rev. L. L. Langstroth, of Chestnut street, a native of this city and a gentleman of equal worth and accomplishments, who has been engaged for many years in the scientific investigation of their habits has most conclusively proved that this is not the case. The various glass observing hives, which have

been used by ingenious naturalists, have always been furnished with shutters, to be opened only when the hives are inspected. Such a sudden admission of light exerts a disturbing influence upon the bees. Mr. Langstroth has hives of his own invention, in which the bees are exposed *to the full light of day*, so that all their beautiful works are as easily examined as the articles in a shop-keeper's window.

They do not manifest the slightest dislike to such a perfect flood of light.

It is obvious that this unexpected discovery must greatly facilitate a thorough knowledge of the habits of this wonderful insect; as the Queen is almost constantly in sight, and all the mysteries of the hive are unfolded in the most ample manner to the lover of nature. We know that Mr. Langstroth has been repeatedly consulted, respecting the best means of ventilating public rooms; and we strongly suspect him of having stolen some of his ideas from the principles on which bees ventilate their hives. We wish he could persuade the community that their public and private buildings ought to be at least as well ventilated, as the humble dwelling of the bee, and thus aid in effecting a revolution, the importance of which to the public health can not be over estimated. [U. S. Gaz.

For the Wisconsin & Iowa Farmer.

JANESVILLE, January, 1852.

MR. EDITOR—Sir: Although we are personally strangers, yet, I trust, we are not altogether strangers to that profession which you have chosen to follow in connection with your duties, editorial.

Presuming upon willingness to communicate any intelligence in your possession, which will be of essential service to the agricultural portions of community, I have ventured to address a chapter of inquiries, with a request, that you, or some of your correspondents, furnish the required answers, if you should deem them of sufficient importance. Having lately located myself on Rock Prairie, and wishing to obtain all the information on matters and things, in general, and, in particular, that I can, especially upon subjects connected with the business which I have chosen to follow.

The inquiries which I wish to propose, are the following, viz: What is the best time for transplanting fruit trees, in the spring or in the fall? What time in the spring? and at what time in the fall? What depth ought the trees to be set in the ground?

What varieties of the apple and the peach are best adapted to the prairie. Composed of, or in other words, does it contain those properties which are essential to the production of healthy fruit trees, and good fruit?—Does the soil at the depth of ten or twelve inches contain potash, lime, &c., enough to produce a large, and good crop of wheat?—Will the young oak and hickory trees of the opening and timbered land do well when transplanted to the prairie? If they will do well, what time in the year is the best to do it?

What varieties of the grain crops are most remunerative; and what the best mode of cultivation. Would it be a chimerical operation for each farmer on the prairie to plant a few acres with acrons, walnuts, chesnuts, &c?

Now, Mr. Editor, if this formidable list of inquiries can be of any use to you or the cause you are engaged in, they are at your service. If any or all of them remain unnoticed, I will not complain. But if any or all of them should, in your estimation, be worthy of being answered, I should be much gratified if you, or some of your correspondents, would give us, through the columns of your useful paper, the results of your experience upon the above queries, and by so doing you will much oblige A SUBSCRIBER.

REMARKS.—In regard to transplanting fruit trees, treatment, soil, &c., see Horticultural Department of the Farmer. The quantity of potash and lime in the soil, can only be determined, with any profitable degree of accuracy by analysis. No analysis of the soil of Rock Prairie has ever been made to our knowledge. We believe it deficient in both potash and lime above the subsoil, which is found generally from six inches, to three and four feet below the surface. Oak and hickory trees can be raised from the seed just as easy as corn or beans, and much more profitably than by transplanting. In fact, it is extremely difficult, to transplant the hickory in a manner, to insure its continued growth, on account of its large and long tap root, which penetrates the earth perpendicularly. The utility, of planting a portion of every prairie farm, with forest trees cannot be doubted. The oak, hickory, chestnut, black walnut and locust, (we would not recommend the latter,) will make a growth from the seed, in eight or ten years, of from twelve to fifteen feet. We have seen oaks of seven years growth, ten and twelve feet high. In the second volume of the Farmer, we more than once, called the attention of our prairie farmers, to the importance of this subject. "What grain crops are the most remunerative, and what is the best mode ot cultivation?" The comparative profits of the various grain crops, can only be determined, by market prices, adaptation of soil, and facilities for marketing.

For the Wisconsin & Iowa Farmer.

Important Discovery.

MR. EDITOR—Sir: An incident in chemistry some years since, first suggested to my mind that paints for common use might be greatly improved in durability, and cheapened in cost, and I commenced a series of chemical experiments with a view of accomplishing these ends, which have been prosecuted at various intervals, as my professional labors would allow, up to last March, when I became fully convinced that I should, at no very distant period, succeed in my undertaking.

At that time I turned my attention to agriculture; purchased a large farm, and commenced improving it; and as I expected to have considerable use for paints upon my own premises, I renewed my efforts to perfect my discoveries, and after a labor of nearly 500 experiments, testing my preparations, and subjecting them to sun, rain, heat, alkalies and every other agent to which paints could reasonably be exposed, I have at last succeeded in producing paints from materials known and common in nearly every community, which are admitted by good judges, to be superior in all the essential qualities which constitute good paints at least for outside painting, to those now in general use.

My discovery, consists mainly in the use of an other fluid (a compound) as a substitute for *linseed oil*, and other solids as a base, in the place of *white lead*, and substituting cheap simple varnishes in the place of those expensive ones now in use.

I use therefore, no linseed oil, none of the common varnishes, and no white lead except in producing a "pure white," and a few of the finer tints closely allied to that color, which constitute but a mere fraction of the paints in general use.

The superiority of these paints are as follows viz.: They adhere better; dry quicker without "dryers;" are less affected by the weather; they dispense almost wholly with the use of white lead. a most deleterious substance to health; are much simpler in preparation and cost much less than those now in use.

All the darker colors, such as the various shades of brown, red, ochre and orange, together with fawn, slate, chocolate, straw color, &c., &c., which are becoming so fashionable for all *outside* painting, can be produced at a cost for *materials*, of about one third the usual expense of common paints; and the brighter colors, as green blue, red, yellow, &c., at an expense of a trifle more than one half the usual expense.

In connection with these paints, I have succeeded in producing two *varnishes*, one, approximating to a light wine color, for varnishing the darker colors, and one, transparent, for lighter colors, both at an expense of not more than one half the price usually demanded for varnishes. Following up my experiments still further, I have produced a *wash* for rough fences and out-houses, at a mere nominal expense, which can easily be made any color to suit the user; is hard and lasting, and can with difficulty be distinguished from real paint at a distance of a few feet.

These discoveries it is obvious will immensely increase the amount of painting both in town and country, as soon as they become generally known; first because they diminish the cost of materials on an average at least *one half*, and secondly because by the information which the discoverer can convey upon a printed fools-cap page, every one who is so disposed, can procure his own materials, and prepare and apply his paints himself, thus saving to himself one-half in cost of materials, and all the painter's bill.

These discoveries will prove of especial utility to farmers, most of whom live at a distance from any professional painter, and many of whom are well aware of the importance of protecting their buildings by paint, and would gladly do it, but can ill-afford the usual outlay. While engaged in the experiments which produced these discoveries, I did not intend to do anything with them beyond my own use, but when my specimens were examined, and the cheapness of the paints known, many of the most intelligent gentlemen in this vicinity pronounced the discovery a highly important one, and in consideration of the labor and expense to which I had been subjected, recommended me to secure to myself whatever advantages might arise from them, and accordingly, I made application for *Letters Patent*, and now offer the discovery to the public as one which I believe to be practical, useful, and available, and a great source of economy, especially to the industrious, and those disposed to do their own work.

I propose to sell individual, town, county, state, village and city rights, and as my desire is that the discovery should be placed before the public as speedily as possible, I have placed the *price* at what is deemed *very low*. It is as follows:

For one person to use upon the premises actually occupied by him, $3. Town, county, state, village, and city rights, $1 per hundred inhabitants, no town city or village being estimated at less than 1000 inhabitants.

These will be the prices to those who remit by letter *free of charge*, and obtain their patents by that means, but those who purchase of agents will be charged about *one half higher*, owing to the expense incurred by traveling. Persons making remitances and applications for patents will be particular to give their full names *legibly written*, with their post office, and the town county and state, of their residence, and those purchasing territory to the amount of $50 or more, will have specimens of the paints forwarded to them by stage or express at their own expense if they wish it, before remitting their money.

Editors of papers generally, who publish this article, or an abstract of it, containing all the important facts, and forward a copy of the print to my address, shall be entitled to a personal right.

Yours, &c., Very Respectfully,

A. H. PLATT, M. D.

Practical Agricultor.

PARK GROVE FARM, Sheboygan Co., Wis., Feb. 15, 1852.

P. S. Post Office; Sheboygan Falls, Wis.

For the Wisconsin & Iowa Farmer.

Shade Trees!

The elegance, as well as luxury, of a plentiful supply of shade trees about dwellings, should be a sufficient inducement to every one who has a home, to expend a little care, at least in their cultivation.

In order to succeed in making trees live, and enjoy a luxuriant growth, it is only necessary to pay attention to a few facts in regard to their nature. Attention to the following points is all that is essential:

1st—The Roots.—In removing the tree from its original position, great care must be taken to preserve all the fine fibres, which alone draw nourishment from the earth, and yet which are so commonly cut or broken off as being valueless.—In perennial roots, these fibres die each autumn, and in this climate are produced early in the spring, about the time the frost is leaving the ground. From this fact it is best to transplant trees in the fall, after the old fibres have ceased to absorb nourishment and may be removed without injury. If removed in the spring their place will not be again supplied, and the tree in most cases dies. It is best to remove a portion of the main roots, and a proportionate amount of the tops—though not to exceed one fourth part of either.

2d—Preparation for planting.—The holes for receiving the tree should be spacious—and a little manure well mixed with earth placed at the bottom. The tree should then occupy a perfectly upright position and the roots covered with fine earth and left to occupy as nearly as possible their original positions, and be firmly fixed in the ground, and supported by a post to prevent the tree from being blown out of this position. If the season is dry, a little water should be poured about the roots each evening. It is better to take pains and have one good tree, than to have half a dozen sickly, half-dead ones. Good shade may be procured in two years time, if proper care is taken in planting them.

James L. Enos.

Madison, March, 1852.

The Corn Worm.

A correspondent of the Maine Farmer, gives the following mode, which he accidentally discovered, for exterminating the corn worm. We have as yet heard but little complaint in this region from the ravages of this pest; but we may look for it, when we begin to turn over our tame grass lands:

"Some three years since, in the month of October, I determined on turning over the seed of about two acres of ground, which had for many years, alternately been cropped of grass and grain. About one half I turned over, the plow running moderately deep, and hauled up for the season. The plat was finished the subsequent spring—uniformly harrowed, the manure spread on, and the whole planted to corn—the rows running crosswise of the furrows. The seed came up well, and in one week after, three-fourths of the corn on the ground plowed in the spring was cut down by the corn or grub worm of most huge dimensions, while the part plowed in the fall remained free from their depredations. I replanted the absent hills with nearly the like result—lime and ashes put upon the hills having but little effect to stop their ravages.—The work of the worm clearly marking where the last furrow was turned in the fall. I then sowed the spring-plowed ground to ruta bagas, and succeeded in raising a decent crop.

Now is there a shade of a shadow of a doubt, that plowing the ground in the fall, exposed the enemy to the "nipping frost," and destroyed him? while, in the spring, he was turned up to the sun and warmed for the prey."

Balking of Horses.—We have always looked upon the habit of balking in the horse as incurable. We have seen it lately stated that the Mexicans overcome this propensity by the following kindly treatment:

The driver approaches the head of the horse, pats him gently on the neck and head speaking soothingly to him all the while; after a few minutes, the horse's sulky humor somewhat subsides, the driver commences to blow very gently up the horse's nostrils, which he continues to do for a few minutes, then soothes and pats him again, and repeats the blowing up of the nostrils, when, it is said, the animal will be found to have been subdued. This is the plan, also, as stated by Catlin, that the buffalo calves are tamed by the Indians; whether it will prove successful in conquering this radical fault in the horse we know not; It may, however, be worth a trial.

So far as our experience goes, kindness is one of the best correctives of bad habits, either in man or beast, and it may be that the gentle treatment indicated above, may be efficacious. [American Farmer.

Durability of timber depends more on the treatment after cut, than the time of cutting. The amount of sap in a tree is about the same at all times. But a large log, in hot weather, with the bark on, having no chance to dry, soon decays; but if immediately sawed into boards, they dry in a few days, and become hard and durable.

HORTICULTURE.

Brief Horticultural Notes—No. 3.

BY JOHN A. KENNICOTT, M. D.

PLANTING ORCHARDS.

In this number I propose giving a few brief directions, under this head, reserving my reasons for a future opportunity. My advice is based upon observation and experience, and is intended for the region between Lake Michigan and the Mississippi, and for most profitable cultivation, in accordance with our present knowledge.

The first, and most important requisite, in selecting grounds for an orchard, is drainage; —second, appropriate fertility—third, comparative altitude—fourth, protection—fifth, aspect.

Choose, then, a soil naturally dry, if possible, or one easily drained, as the only safe alternative—fruit, trees will not long "abide wet feet"—this rule is, therefore, imperative.

If your soil is naturally fertile, so much the better; but if not, you must make it so.—Lime is needed for fruit trees, and there is often but little in a deep mucky soil. Prepared muck, well rotted manure, especially from the cow-yard, and a liberal dressing of burnt, or frost-broken clay, are sure to benefit a poor, loose sand — while long manure, plowed under in autumn, will help to open, as well as enrich a stiff clay. Ashes never come amiss in the orchard—leached ashes are very valuable, but if unleached, less will be needed. This rule, to a limited extent, is as positive as the first.

The more elevated your site, other things being equal, the better for an orchard. You will have fruit on the hill, when there is none in the valley.

For protection, seek a natural, or create an artificial break-off, on the sides exposed to heavy summer, and cold winter winds. The best is a belt of evergreens, or a plantation of other timber trees; but a high fence, lined with seedling peach trees, while the permanent protection is growing, will do very well. An orchard should be defended always, while young, by a rabbit-tight hedge, picket, or board fence.

So far as regards the apple, we have found aspect of little moment. But for the peach, nectarine, and cherry, we are certainly inclined to prefer a northern, or western exposure —and we think, also, for the pear; and we are by no means certain, that all our fruits, except the grape, may not be safer thus, than when facing either south or east—and here, the Catawba and Isabella grapes must be protected in winter, if facing the sun, and should be, perhaps, under all circumstances, as far north as Wisconsin.

PREPARATION OF THE SOIL.

This is best done, at least partially, in autumn; but always plant your trees in the spring. Unless over sand or gravel, you must drain your grounds, before the trees come into bearing, and better, if before planting. Cut drains about three feet deep, and six inches wide at bottom—be sure, of course, that the water has sufficient descent; and if you cannot afford drain tiles, fill eight inches with small stones, if at hand; or about a foot with straight brush, (this will not last long, however,) and cover first with coarse grass and inverted sods, before filling up with earth.—There should be enough of these drains to carry off all surface water. In a wet soil, even open drains are better than none.

DRAINAGE.

The next thing is to complete the drainage, and render your soil as perfectly open to the roots of plants, as it is to warmth and falling water; and as rich as needful, throughout. Say, to a depth, of from 12 inches, in light sand, to 24, in stiff loams, or all rich soils over impervious clay.

Where, as in much prairie soil, there is little clay in the surface, and abundant elements of fertility below, "trenching" with a spade, is the best of all means, but trench-plowing, (one plow behind another, in the same furrow,) is much the cheapest. Where there is none of the sub-soil needed, on top, the common sub-soil plow will do the business admirably.

If you can not trench or sub-soil your whole lot before planting, you must work a narrow

strip, the right way, where the row of trees is to be planted, and finish the balance next fall.

Number 4.

SELECTING TREES.

You cannot depend, entirely, on eastern descriptions of fruit, for a western orchard.—Many of their "best," are of no account here, and some of our favorites are of small value there. Select your varieties, for domestic use, to please your own family—remembering, that for stock, sweet apples are preferable, and that there are varieties suited to drying and stewing—and others that are fine for cider, or excellent for jellies and preserves, and yet not desirable for the dessert, in their raw state.

If you plant for market, early fruit will be found to pay best, if you are near your customers, and winter, or late fall, if you have some distance to haul your crop. The largest and most beautiful sorts, sell best to those ignorant of quality, but those who know, will always regard flavor, and other good properties, before appearance.

Go north, rather than south for your trees, and never seek for the tallest and straitest specimens, for such are the least valuable in the orchard. The top, of a healthy desirable tree, is always proportioned to its hight, and the diameter of the trunk is in accordance with both. The more "stocky," the better—and the lower, and larger the head, the more valuable the tree—other things equal. Don't be frightened at a crooked tree—they are often the best, and the earliest bearers—but reject a forked one. See that your tree has plenty of roots, and don't let them dry, or freeze, before planting—better cover the roots as fast as dug, and when you get them home, bury the roots in mellow earth, until you are ready to plant them.

Trees, with the roots properly "puddled" and packed in moss, may be kept a month, and be transported thousands of miles, with more safety, than those rooted up, and tumbled open, into a wagon, for a five mile drive, on a dry, windy day. But if your trees are dry, when you receive them, you can not treat them better than to bury them, root and branch, in fine mellow earth, and leave them there, until the wood looks fresh again. We generally wet them, in warm water, before burying, and plant in the evening, or on a cloudy day—giving plenty of sun-warmed water, when we plant.

For apples, pears and plums, we think that the rows need not be over 20 to 24 feet apart and the same distance, in the row; but in the quincunx form, which gives much more room, peaches, cherries, &c., will do, twice as thick on the ground—and "dwarfs," of all sorts, may be planted almost as close together as corn-hills—5 to 10 feet, being distance enough. But we are treating of standard trees, and orchard planting; and eastern men will tell you, that double our distances are necessary; but not so here.

If you can choose, plant apple trees on the richest and worst drained portion of your orchard lot—and your other fruits, especially pears and plums, on the best drained—and if stiff clay, all the better for the plums, and not so bad, as one might think, for the pear, tho' this fruit loves a very dry bottomed, deep, rich loam, with about 3 or 4 per cent of alumina; and a few varieties of the plum will thrive in sand, but a soil of the stiffest clay if under-drained, produces this beautiful fruit, in the richest perfection.

Give your peach and cherry trees, (and your grapes, if you please,) the highest and poorest soil—a clay barren, or a gravel knoll, or light sand, all of a light *color*—for your object is, a moderate growth, of well ripened wood, which shall remain dormant, from the fall of the leaf, to the latest day in spring.—These trees *must* have low heads, to defend the trunk from the blistering sun of summer. I have known peaches and cherries abundant, on trees in the shade of a high fence, or a building, when not a fruit could be found on exposed ones, in the same vicinity.

When you are ready to plant, dig and mellow the ground, very thoroughly, where the tree is to stand; but dig *no deeper*, than you have trenched or sub-soiled and completely drained. It is often. if not always, well to work in some manure, below, where the tree

is to be planted—but this is not essential, and is sometimes troublesome, for you want only the best mellow earth in contact with the roots.

You should try your tree, to learn the necessary depth, which should never be greater than that of the same tree, in the nursery.—Better raise the ground over the roots, than settle them below their natural depth.

Pare the bruised roots before planting, and if these are scanty, and the tree large, shorten the tops, by cutting the new wood, to three or four eyes, and removing such branches as can be spared. Set the heaviest part of the top, or natural crook, so as to lean towards the heaviest summer wind ; which blows from the south-west in my vicinity.

Spread out the roots, and distribute them evenly and naturally, while an assistant holds the tree in the right position ; and with the *hand*, fill in fine earth—covering every root in its place—and when nearly finished, if the soil is dry, give warm water enough to wet the soil about the tree, very sufficiently ; and let this be the first and last watering. After the water has had time to disappear, you can go over the trees, giving more earth and pressing down, and packing the ground lightly, if the tree does not stand firmly—but never use stakes, for this purpose, if you can possibly do without them.

The Mulching is the last process, and a very important one. Cover the ground over and beyond the roots, around every tree, to the depth of 6 or 8 inches with straw or any coarse litter, and this will preserve your trees, and cause a rapid growth, and may be plowed under for manure, when no longer needed for shade.

Randolph Center, Wis., Feb. 28, 1852.

Ed. Wis. Farmer.—I received your prospectus for your Wisconsin Farmer and have made some exertion to raise a club for it, with tolerable success.

I am about starting a nursery here and want to purchase a half bushel of apple seeds, also peach and pear seeds. Can you give me some information where I can obtain them in time to plant the ensuing spring? I would also like to be informed what is the best time and mode for planting the different kinds of seeds? Yours, respectfully,

John M. Bay.

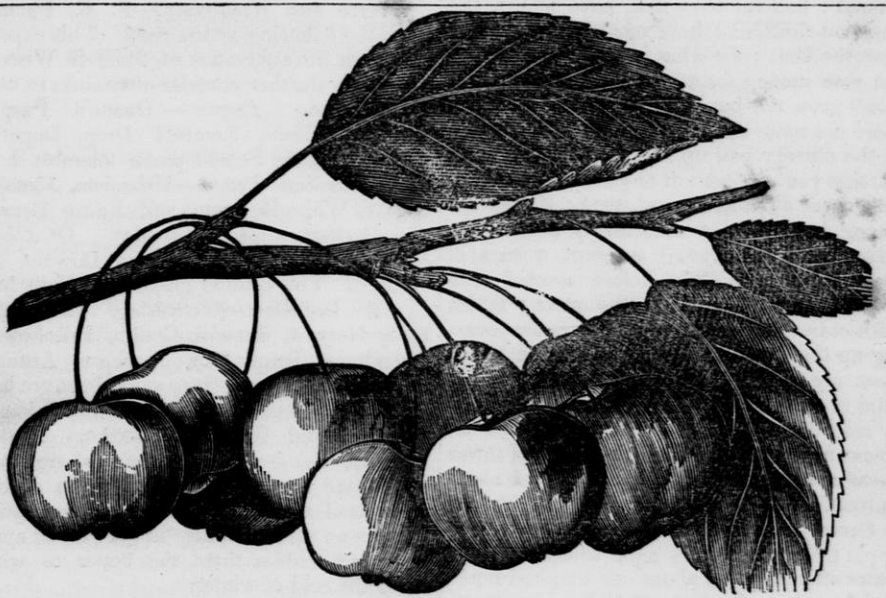
Remarks.—We cannot give the desired information, in regard to where the seeds inquired for can be obtained, with certainty. We think it will be difficult to procure them short of Buffalo or Rochester, N. Y. Messrs. Rapaljee & Co., seeds-men of the latter place would be likely to have them. We believe apple, pear and stone seeds ; such as the peach, plum, &c., should be planted in the autumn, just before winter sets in.

For the Wisconsin & Iowa Farmer.

Tree Planting.—We trust none of our readers will fail to improve the present favorable season for planting—which if neglected now, cannot be attended to for a whole year to come ! Only think—a whole year of tree-tops, fruitless poverty and nakedness—a whole year behind your neighbors ! Especially should our prairie homes be furnished with trees—the light of whose blessed countenances can alone make those vast expanses really tenantable. Put out at least a few then, only make a beginning, and our word for it you will not be slow to follow it up.

On the prairie especially should forest, as well as fruit trees be planted. Our woods afford an abundance that can be had for the getting — Black Walnut, Butternut, Maple, Elm, Oak, Bass-wood, Cotton-wood, Balm of Gilead, &c., &c. The last two named are, in our view, most valuable for extensive plantation on our large prairies for fuel, shade and timber, if a very speedy growth is desired.—They are also of very easy propagation, growing readily from "slips." At Mr. Whitney's place, in Lee co., Ill., we saw a cotton wood that came from the seed in 1840 —now fifteen inches in diameter near the ground ! Mr. W. has already several hundred most splendid specimens of both the cotton-wood and balm of Gilead, and intends planting largely of them for timber. Indeed, where timber land is worth from $20 to $60 per acre, and prairie from 2 to 5 only, it would seem best to make an exchange if possible ! ! P.

Hundred-Fold Wheat.—We are indebted to Elliot's California Express for a sample of California wheat, of the tallest kind. The head is about six inches long, and contains about 100 kernels, most of them remarkably large and very plump. If the land of California will produce such grain as this, farming must be a better business than gold-digging. [Boston Trav.



Siberian Crab Apple.

WAUKESHA, March 10, 1852.

MR. EDITOR—Can you or some of your correspondents inform me whether the Crab Apple Tree, so common in this state can be turned to any better account than the production of its natural fruit? I am told by some that the fruit of the crab, can, and by others that it cannot be improved. Will the pear or quince flourish on the crab stock?

I. H.

REMARKS.—We cannot answer the inquiries of I. H. very satisfactorily. All attempts, so far as we have been able to learn, to improve the crab apple, have been attended with no very favorable results. The main difficulty we believe, is, that the stock of the crab tree, does not grow correspondingly with the scions of improved fruit trees, when grafted into it.—The limbs become so large and heavy by the time they begin to bear, as to break at the point of grafting. We are told this difficulty may be obviated by grafting close down into the root; in doing which, however, we see no advantage to be gained, in getting a supply of fruit at an early day, over of transplanting trees of the right kind, from the nursery, of from three to five years growth.

The best disposition to make of our crab trees, when they stand in a desirable place upon the premises, for such a purpose, is to convert them into ornamental shrubs or trees, by working them with the Siberian Crab Apple, either by grafting or budding. They may then not only be made highly ornamental but valuable for their fruit, which is much sought after for sauces, tarts, preserves, &c., at high prices. The blossoms of the Siberian Crab tree are large and beautiful—the fruit red—hanging in clusters—very tenacious of its hold, and usually remains upon the tree a long time after being fully ripened.

For the Wisconsin & Iowa Farmer.

TURTLE, March 10, 1852.

MR. EDITOR—As I am frequently asked by my neighbors and acquaintances respecting the raising of fruit trees in this section of country, and as most of my neighbors now take the Farmer, I would beg the privilege of saying a few words through its columns.

Well; in the first place, never buy trees that have been shipped or brought into the country from a great distance for they are liable to die. In the next place they are generally trimmed up to a riding switch at the top and the roots cut off hardly long enough for the handle of a walking stick; such a tree, if it lives at all will be two or three years making up its mind about it. I have had half of such trees die the first season, when others have done well. We have a plenty of good trees in southern Wisconsin and northern Illinois. Go to the nurseries and look

around ; find the trees that have grown the best and thriftiest ; have more regard for this than the kind ; for what is the use in paying out your money for a good kind of apple, if it won't grow nor bear in this region. I know there are some such kinds here. If you go to the nursery pull up and have all the roots on, that you can get ; if any are broke or mutilated cut off the injured part ; if any are gone, trim the top accordingly ; have the trees out of the ground as short a time as possible ; leave a little hollow around each tree to send the rain to the roots ; mulch with coarse manure, to keep the sun from drying up the ground. Plant the ground to almost any crop. If you sow the ground to any kind of small grain, which you do not hoe ; or seed down, to any kind of grass when the trees are small, better pull them up and throw them away ; you will get an orchard about as soon.

Seven years ago, I transplanted about 1000 apple trees ; two years ago, which was five years after, I raised about one hundred bushels of apples. Last year I had not so many, on account of the blight.

Yours, B. E. Mack.

How to Cultivate the Apricot.

A sound, practical article from the editor, recommends as the chief requisite for success, and to prevent the frequent loss of the trees from various causes,—First. To keep the trees low, and to head back the shoots in spring, avoiding the practice of trimming up to a naked stem, and thus exposing the bark to the hot sun. Second. To provide a deep, well-drained soil, well fertilized with wood ashes. Third. To plant in a cool aspect, to prevent the too early swelling of the buds, and their consequent danger from spring frosts. Fourth. To prevent the loss of the young crop by daily jarring down the curculio on spread sheets. Where only half a dozen trees are cultivated, there is no mode of making war upon this insect so sure and reliable as jarring the trees daily during the month of May, with a pounder, (sheathed at the end with India rubber,) gathering the insects upon the sheets and destroying them. The experience of a correspondent is added, that though previously unable to depend on his trees for a single apricot, after putting the jarring system into practice, he actually obtained three thousand most beautiful and luscious apricots, the first season of trial, from five trees.

[Albany Cultivator.

Forty miles of the Panama railroad will be ready for use by the first of March. This will save one day in time, and considerable fatigue and danger.

Fruits for Wisconsin.—F. K. Phœnix gives the following, as the result of his experience with the cultivation of fruits in Wisconsin, where the thermometer often sinks to 20° below zero. *Plums* — Duane's Purple, Smith's Orleans, Emerald Drop, Imperial Gage, and Long Scarlet prove tolerably hardy. *Hardiest Pears*— Urbaniste, Flemish Beauty, White Boyenne, and Easter Beurre. The Bartlett, unusually tender. Of *Cherries*, Mayduke, Arch Duke and Downer, are hardiest. The Clinton grape is perfectly hardy—the Isabella needs covering. Of *Apples*, Early Harvest, Keswick Codlin, Dutchess of Oldenburg, Drap d'Or, Fameuse, Autumn Strawberry, Pomme Gris, and others, are hardy, and maintain their eastern reputation.—Rhode Island Greening, Roxbury Russet, Baldwin, Rambo, Esopus Spitzenburg, and others, are tender. The application of old, well-rotted manure, in moderate quantities, induces an early maturity in growth in apple trees, and enables them the better to withstand the cold of winter.

Bleeding of Grape-Vines.—When the grape is pruned in autumn, in winter, or very early in spring, the sap-vessels will close, and no flow from the wound will follow. But where this needful work has been omitted at the right time, those who have an aversion to prune in consequence of the prodigious flow of the sap, which takes place as the buds expand, may save themselves all trouble from this cause by waiting some days till the leaves are as a currant leaf. If the pruning is then performed no bleeding will take place. — Pruned at this season, we have found young hardy vines to do as well as at any other time. The injury resulting from the flow of sap is, however, over-rated; and by some experienced cultivators it is believed to produce no injury whatever.

☞ In horticulture as in agriculture, the United States of America has a great destiny to fulfil. Our territory is not only immense, but so diversified in soil and climate that all the most valuable grains and fruits can be produced in such abundance as will enable us to supply other countries less favored in these respects. The intimate connection now established between all parts of the world has removed the barriers which distance heretofore created, and we have now a clear course. Cultivators may redouble their energies with a sure prospect of reward, and if our government, in its wisdom, should see fit to lend a helping hand, all the better.

[Western Hort. Review.

Novel Method of Propagating Fruit Trees.

The following method of starting an apple orchard we extract from the Patent Office Report for 1848. Of the utility of this method of propagating fruit trees, we are unable to speak, as it is novel to us ; but where there is a difficulty, in obtaining fruit trees, it has the merit of being comparatively inexpensive:

"In the spring of 1839 I bought 100 seedling apple trees for $8, and paid in work. I planted them out in my garden in rows four feet apart, that I might run a plow between them, and at five feet apart in the rows, and kept them well cultivated that season.

In the spring of 1840, in the early part of March, I procured from the best orchard I could find (John Woods, esquire, Quincy) two or three large bundles of scions, cut from horizontal branches of the last year's growth.—These I buried in my garden three inches under ground till I should want them. When the season was so far advanced that the buds on the trees began to crack open and the small leaves to appear, I dug a trench along each line of apple trees about six inches deep and about the same width. I then bent down an apple tree, and, with a fork stick drove into the ground, held it there firmly ; then, with a sharp pointed strong knife and a hammer, I commenced grafting. First, I drove the knife through the tree at the root, and made a cleft large enough to insert my scion. I then with a sharp knife cut my scion about six inches long, sharpened the lower end to a wedge-like form, drove it into the cleft until the bark on the scion just met the bark on the tree ; pulled out my large knife ; the split in the tree of course closed up and held my scion fast. In five or six inches I stuck in another, and continued on so, until I came to the top of the tree. I then filled up the trench with fine loose soil, tramping it down with my feet, leaving only the upper bud out of the earth. The top of the tree I covered up in the same way, leaving the ends of the twigs just out of the ground. In this way I treated my 100 apple trees, and in two days' time I had finished them. I would remark that the trees were about 1½ inches in diameter, and very thrifty. The scion grew astonishingly well. Of about 800 scions set, all grew but about two ; and in two years the scions had formed roots of their own, so that when I took them up I broke off the old stalk and threw it away, and each twig of the top grew and formed roots of its own. Thus, by a little industry and management, I made 200 good grafted trees for my own use, now bearing trees, and sold 1,000 trees, some for 6 to the dollar and some at 8 to the dollar.

There is probably no food more natural to mankind than a good ripe apple. It is anti-dyspeptic and anti-bilious ; and if the people in this great valley of the west would eat less corn bread and bacon, and drink less strong coffee and whiskey, and eat more of those rich, juicy apples, cooked or uncooked, we should see, hear and feel less of those billious complaints, fevers, agues and chills, which every one is more or less subject to every season."

TIMOTHY DUDLEY.

Mendon, Ill.

WIDE EXTENSION OF ROOTS.—E. Harkness, of central Illinois says, "I have found the roots of young apple trees, not more than four inches in diameter, which had penetrated *four feet downwards* into the clay subsoil, and *ten feet* from the collar of the tree," or occupying a bed of earth four feet thick and twenty feet in diameter. A tree one-quarter the diameter, or the size usually sold at nurseries, must have a proportionate extension ; hence, in cutting a circle with the spade, only a foot in diameter, in transplanting, a large portion of the roots must be cut off and left in the soil.

RED ANTWERP RASPBERRY.—We hear of magnificent returns for labor, land and capital devoted to this splendid fruit. One horticulturist, in Connecticut, realized $800 for his last year's crop, on half an acre, while the huckster to whom he sold them gained nearly as much more. $3,000 per acre is rather tall picking for an acre of small fruit ; but at the present prices, this amount can be realized.

EVERGREENS.—Planting evergreens around our homes is next to planting virtue and integrity in the hearts of our children, for, amidst the blustering storms of winter they are the loveliest and most graceful objects the eye can rest upon, and amid the turmoils and trying vicissitudes of life, these traits are the purest and *greenest* of all that is worthy in human character.

Carrots for Horses.

S. W. Cole, Esq.—Sir: I observe an article in the N. E. Farmer of last week, on the nutritive qualities of carrots, as winter food for horses; a circumstance which does not appear to be generally understood among farmers and others keeping horses. In some districts of Scotland, especially Aberdeenshire, and the light sandy countries on the eastern coast, carrots are grown entirely as food for horses, and are a very abundant and profitable crop, producing from twenty-five to thirty tons per acre, and farmers can afford to keep their horses in excellent condition on carrots and hay, who could not afford to give them any thing else.

This species of food however, is not confined to farmers alone, as richer gentlemen's carriage and riding horses are similarly fed.—And, as your article states, the horses fed in this way have a finer appearance, and better health, than those fed on oats or other kind of grain. And many gentlemen give their horses a daily supply with the view of keeping the hide soft, and the hair glossy and smooth.

The way in which they are prepared for the horses is somewhat as follows: The carrots are topped, washed, and cut up with a turnip cutter, (when one is on the farm, if not they are cut up in pieces with the hand,) then mixed with equal portions of cut hay, and scalded, or what is better, on some farms they are steamed, a quantity of salt is mixed to season the food and when cool it is given to the horses in the requisite quantities. I have known many horses which were fed every winter on this kind of food, and healthier and better looking horses could not be found.

In some places on the eastern sea shores of Britain, large crops of carrots are grown in the drifted sand, and are the finest carrots that are met with in the markets, and though the drought may be greater here in summer, I still think that much more land could be profitably cropped with carrots, than is generally done. The light soils in many parts of New England are well suited to the crop, but there may be obstacles to their culture with which I am not acquainted. [N. E. Farmer.

The Guinea Hen.—The Guinea hen, or Pentado, is near an everlasting layer. They are said to unite the properties of the turkey and the pheasant. They are a native of Africa, though said by some to belong equally to this country, and are easily domesticated.—Its flesh is more like that of the pheasant than the common fowl, both in color and taste, and is reckoned a very good substitute for that bird. It assimilates perfectly with the common fowl in its artificial habits and kinds of food. Its gait is peculiar, as are also its cries. They are fond of marshy places—always perch during the night in high situations or on trees. It is a little singular that American farmers do not turn their attention to these fowls. A knowing Jerseyman, named David Booner, from England, hired a patch of five acres four years ago, and commenced raising eggs for the New York market. Booner has never hired any help, and at this moment owns a farm, for which he paid $4700, of which the buildings cost over $3000. His farm is all paid for, he owes not a cent in the world, and he owns a flock which varies from 800 to 1200 Guinea hens. [Suffolk Dem.

Agriculture in Oregon.—A letter from Umpqua Valley, Oregon, published in the New York Courier, says the climate is so mild in that quarter of the globe, that sleeping out doors is no hardship. Even in winter, the ground in the valleys never freezes, so that oats, potatoes and barley are sown in the fall. The wheat has the largest berry ever seen. Oats of a corresponding quality are raised *five years in succession from one sowing*, yielding at the rate of fifteen bushels to the acre at each crop! Indian corn does not do so well, on account of the droughts in August and September; but potatoes, turnips, and other roots, in the moister locations grow to a great size. No insects or weeds trouble the crops of any kind. Apples produce abundantly, and plums, crab-apples, raspberries (a large yellow variety,) whortleberries (a red species,) strawberries, and several other berries of fine flavor, not known at home, are very abundant. Government *gives* to every actual settler on public lands in Oregon, six hundred acres in fee simple.

Agricultural.—A sailor friend writes me that he lately "boarded" the island of St. Thomas, off the coast of Africa, and saw the natives plowing exactly in the old Bible fashion. They had sorry teams and were ripping up the fertile soil with sharp stakes, just as if a cast-iron mould board had never been heard of. He saw also a specimen of threshing that he had heretofore considered as belonging to the primitive ages. A mass of grain was collected in a yard, and some animals were cracked around over it at a lively pace. A fellow in charge of the job laid it over the cattle as if threshing indeed.

[Commonwealth.

☞ **Georgey, the Hungarian traitor is 33 years of age. He would not have been, if the gallows had had its due.**

EDUCATIONAL.

CONDUCTED BY J. L. ENOS.

The Constitution—Importance of Studying.

To acquire positive knowledge is very far from being the only, or even the principal object in the topics of education. The chief object is to strengthen, discipline, enlarge, and in all respects improve the mind.

But the mind has various faculties, or susceptibilities of improvement in various directions.—Whatever this may be called, it is certain these faculties may be improved by different kinds of exercise. Thus the memory may be improved in a remarkable degree, while the reasoning is deficient So, also, the reasoning may be exercised in different ways.

I have exhibited mathematics and astronomy as educators in strict, logical reasoning; history as teaching social science; language as teaching the structure and philosophy of thought; literature as the written expression of thought; and conversation as the interchange of intelligent minds.—But neither of these teach that peculiar train of reasoning which is connected with the operations of civil society. They raise no questions in relation to law and government. Now, it is absolutely certain that the whole train and manner of reasoning, in relation to civil laws, is totally different from that called forth in the positive sciences. A new class of ideas is developed, and a dormant species of intellectual functions called forth. It follows inevitably that the study of the best form of government will be a useful element in any well adapted course of American education. What is the best form of government? The constitution of the United States, is the only instrument which exhibits a perfect picture of republican government.

That instrument is itself, an outline of the science of organic law. It is a study for the wisest of men, and is to all young minds the geometry of law. It contains all the principles in their elementary form, which enter into the idea of government. Nothing, therefore, can improve the mind more than a critical study of that instrument.—Nothing can be better adapted to bring out that kind of reasoning which is requisite to the perception and understanding of the structure and principles of civil society.

Nor need any one apprehend that the value of this study will diminish with the passage of time. The constitution is an imperishable monument in the highway of nations. The waves which sweep away the ephemeral productions of human genius, wash in vain its adamantine base. It is a durable structure. Opposition will cement its strength; age will make it classical; posterity will admire its beautiful proportions; generation after generation will repose in security under the protection of its lofty columns; the student of liberty will come a pilgrim to its portico from every clime, and its glorious form become a model of every nation.

The Future.

When I read the prophetic delineations of happy future, and behold the beautiful pictures drawn by distinguished writers; when I look upon the visible universe, and see every law perfect—every animate or inanimate thing fulfilling its functions—every orb rolling with unvarying accuracy through its appointed circuit, and when I feel and know, that man has every faculty of soul and every taste adapted to perform, bring out and enjoy the same round of beautiful harmonies—nothing wanted but his own will—I also feel, that the prophetic picture is not a delusion; that the time will come, when humanity will exhibit the same beautiful order and harmony! When the perverted mind will be restored to its rectitude, and this earth exhibit the scene of a happy and a rejoicing people!

But *when*? It cannot be doubted that this period may be hastened or retarded by the action of the people themselves. If they prefer darkness rather than light, they may be suffered long to dwell in darkness. If they would hasten the time, they must take the light and diffuse it; the light which the *few* have must be made common to the *many*—the lump must be leavened.

It is the mind—the soul—which must be enlightened. The heart of the fathers must be turned to the children, and the heart of the children to their fathers—when, in the language of the last prophet, the now risen Son of Righteousness shall spread the healing of his wings over the earth to make it a delightsome land.

Teachers' State Convention.

To the Practical Teachers of Wisconsin:

Having been appointed by the Dane County Teachers' Association, to correspond with the active teachers of the state in reference to the propriety of holding a state convention, composed of practical teachers, at some convenient period not far distant, I beg leave to call your attention to a few facts going to show the necessity for such a proceeding, and ask you to forward me your views with regard to the movement and your names to be appended to a call, if you should approve the measure.

Such a convention would bring together the teachers of the state— to become acquainted with each other—it would create a far greater enthusiasm in the cause of education by bringing the combined knowledge of the whole into such a po-

sition as to be received by each.

As teachers we wish to know with whom we are laboring, in the great work of educating the youth of the state.

We wish to convene the practical teachers only, those of the same profession disconnected with any other. Such a convention will tend to give teachers more noble views of their calling and operate to furnish the state with an improved class of teachers. Let us have an association of which every true teacher of Wisconsin will be proud—in which every one will feel a personal interest.

JAMES L. ENOS,
President of the Dane Co. Teachers' Association.
Madison, Feb. 1852.

Teacher's Institutes.

These valuable auxiliaries to the cause of common schools are steadily gaining favor with the teachers of the state, and some few profitable institutes have been held. The attempt to establish them in most of the counties have failed, simply because the *teachers* of those counties trusted to other persons and to other professions to do the work and to reap the honors.

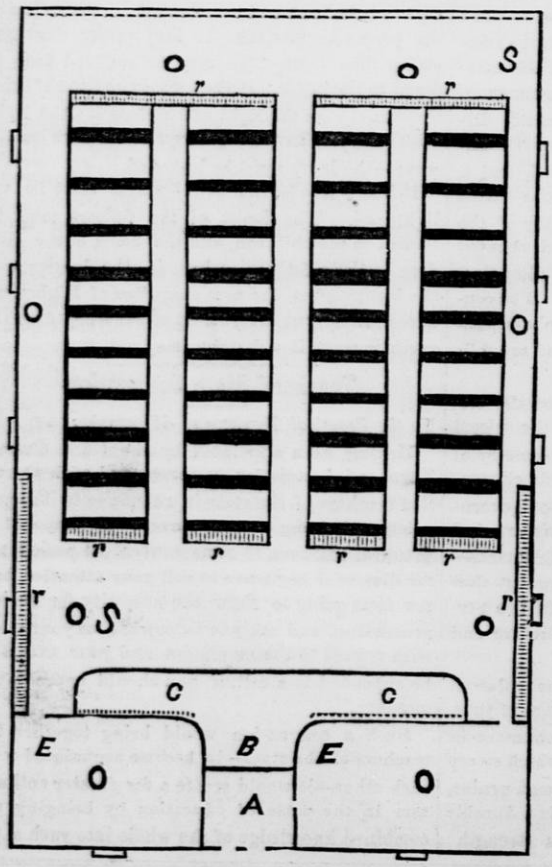
This was as we expected, and from it the teachers of those counties should learn a valuable lesson. Trust not to men of other professions—lawyers, doctors, ministers, or school superintendents, to do your work for you; but organize yourselves into an association, and then select your own teachers to take charge of the institute; and be careful to select only practical teachers—depend upon it they are the only persons capable of benefitting you in an institute.

You may, from theoretical educators, derive much pleasure, in listening to fine spun theories, but will receive very little real benefit to yourselves as practical instructors. Teachers should feel this and act accordingly.

Horace Greeley handed a friend $1,000 to present to Kossuth at the New York banquet. Better, this, than silver plate, or fine speeches.

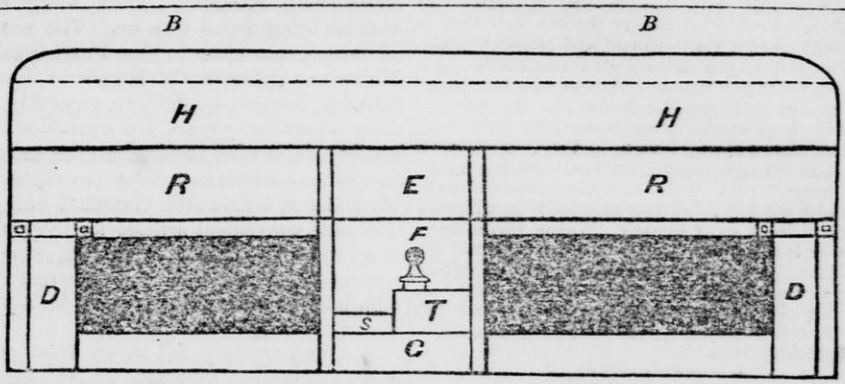
School House to Accommodate 80 Pupils.

PLAN RECOMMENDED BY J. L. ENOS.



DESCRIPTION.—A, general entrance; E E, entries which can also be used for recitation rooms. B, library; C C, teachers platform; o o o o o o o o, tubes for the reception of hot air from furnace below; r r r r r; recitation seats; dotted lines, black boards. The windows are denoted by projections on the outside. The entire building on the inside is 26 by 54 feet. Entries at the side, 8 by 10 feet each. Principal school room, 26 by 46 feet. It is designed that this room should be heated by hot air. If stoves are preferred they can be placed at S S, and under each should be an opening with a tube leading to the cool air without. These tubes should be furnished with valves to shut off the cold air when desired.

This building, completed, would cost from eight to ten hundred dollars, and by a slight modification may be constructed so as to accommodate 60 or 50 pupils as the wants of the district may require. The walls should not be less than 12 feet, and the windows to arranged as to be let down from the top.



VIEW OF THE INSIDE OF THE WALL BACK OF THE TEACHER'S PLATFORM AND TABLE.

B B, border; D D, doors; G, case for globes or books; T, teacher's books; S, Register; E case for outline maps, &c.; H H. spaces for pictures in frames; R R, geometrical diagrams, maps, &c.—The black boards occupy the wall between the doors, with the exception of the case for books, globes, maps, clock, thermometer, flowers, specimens of natural art, &c. The black board is three and one half feet wide the bottom being 2½ feet from the floor. The end of the room opposite the teacher's desk, is covered its entire length with a black board, 2½ feet from the floor, and 3½ feet wide. Above this on the wall, should be suspended maps, charts, &c., calculated to please the eye and cultivate the mind.

For the Wisconsin & Iowa Farmer.

The Dull Scholar!

Teacher, have you ever had one of the above mentioned in your school? If so, what did you wish him? Were the words you used to him, harsh ones, or kind? How did you select and administer your epithets? What success followed your remedies? Have you ever been gratified to obtain a cure; the result of your applications? How often have you failed? How often have you succeeded? How often have you wished, or tried to succeed? How many times have you patiently given your thoughts to a plan, that shall lead to a prosperous issue? These are not meaningless questions, although the subject be dull. Onerous as are the responsibilities of any teacher, they are greatly increased by the admission of a dull scholar into his school. His entrance brings peculiar additional difficulty. Enroll him, and there are demands for thought, skill and patience, never made before. Does he obtain them?

Whence comes this dullness in the scholar?—It is invariably the offspring of an indiscreet education—at home or at school. It is therefore only one of the many mal-products, which, resulting from an ill-directed governing, require the care and vigilance of the teacher; and is it more difficult to educe that little which is good in the dull scholar, than to correct, or lop off, that much which is bad in the vicious? Has the one any greater claim upon the teacher's energy, or time, than the other? Considered morally, are not their claims equal? Practically—are not the results of well-directed effort clearly in favor of him of slow intellect? It is more conclusive of a mechanic's skill, when, with bad material, and ill-constructed instruments, he produces even a passable product, than when, with superior instruments and material he produces a superior article. The one is achieved in spite of hinderances; the other follows as a matter of course. There is more credit due to the teacher who shall present a class of boys, slow of understanding, passably ready in an examination, than to the teacher whose intelligent class shall show themselves prompt and thorough. For more labor has been expended, more patience exercised by the former than by the latter, although the result seems to speak differently. To the one teacher intelligence is committed; by the other it must be educed. By the one, mind has been redeemed, almost created. The other has only accomplished that, which his pupils, soon or late, would accomplish for themselves, by their own force of character. How frequent is it, that the boy already made familiar with the appellations "blockhead," "stupid," and nearly spoiled by consequence, has been raised from his despairing state by the encouragements of a good-natured teacher. The variety of nature's endowments is infinite.—Touch the right chord in that same "dull boy," and he will surprise you by his capability? The peculiar talent, which each scholar has in spite of his dullness, should be discovered, developed, encouraged. Encouraged—for encouragement is the most effectual agent that can be used upon him who is so totally dispirited. It is grateful to him, for it is so uncommon. It renews, or imparts, confidence; incites action; creates self-respect.—He is elevated by a single word of approval, and, becoming convinced, former anathemas notwithstanding, that he has indeed a mind, he is stimulated to improve it. What boy will put forth an endeavor, when he is told it must fail? What boy will strive to excel, when every look and word of the teacher declares it is impossible? He will always remain at the foot of the class, who is repeatedly informed that that is his place? Upbraidings at school, chidings at home, taunts from

his associates, will degrade any scholar. The adult mind could not endure the one half that is imposed on that youthful one, and remain sound.

Teacher, if you have a dull scholar in your school, while you commend others, do not forget to encourage him. Look for his capacities.—Watch him at the play ground, he will show himself there, if any where; for there, unrestrained by your presence, nature will out. Draw him out, and towards you. Give him appointments of trust. Let him see you think him somebody, he will soon learn to think so of himself. Never frown upon him, or laugh at him, in his weakest attempt. Do not pass him off even with faint praise. Give him all you ought. Send him out into the world as much a man as he can be made. He, and the world, will bless you for it. JABEZ BROOKS,

Appleton, Wis.

Tapping a Horse in the Mouth.

The editor of the American Veterinary Journal has the following relative to a practice but too common, and which we have often regarded as impolitic, if not brutal. We do not believe in the old system of our forefathers relative to practice of the healing art, either on man or beast. The necessity of creating a new disease to cure a present one, we do not believe ever existed, and it is only to the natural strength of constitution on which such *arts* have been practiced that credit is due. [Ohio Farmer.

"We happened, a short time ago, to be on the road, and there saw a valuable horse down, the owner of which was industriously engaged in performing some sort of an operation, the nature of which we could not rightly comprehend. On inquiry, we learnt that he was "tapping the horse in the mouth, just to start the blood." The instrument used for the purpose seemed to be as blunt as a horse-shoe, and just about as well calculated to accomplish the object. We begged of him to desist, (to which he readily consented,) and see what nature could do. In a short time, to his surprise, the horse got up and went on his way. It is frequently the custom, when a horse falls down in the street, to bleed him from the mouth; when in many cases, if he were let alone, recovery would be rapid; whereas many valuable horses are ruined by the operation. We have in our recollection three valuable horses that were lost to their owners, from loss of blood, by cutting the palatine artery. Unfortunately men are apt to be too hasty. The moment a beast has fallen, they are bound to have him on his perpendiculars in double quick time. The teamster is in a hurry—cannot wait for nature; she is "too slow a coach" for him. He tries what virtue there is in the whip; that failing, he obtains a knife, and "starts the blood." By this time the horse shows signs of returning animation—looks wildly round, and, on being urged, gets up. The credit is, of course, awarded to the blood starter.—Horses not unfrequently fall down from exhaustion, induced by debility, especially when their muscular powers are overtaxed. The better plan in such cases would be, instead of bleeding, to administer some remedy calculated to act as a diffusible stimulant and tonic. The most convenient articles for this purpose, as an extemporaneous preparation, are—tincture of ginger, half an ounce; tincture of gentain, half an ounce; to be given in a pint of water.

Horses frequently fall down from sudden attacks of vertigo, staggers, &c., the causes of of which can, in many instances, be traced to physical impediments to the return of blood from the brain. A strap buckled too tight around the throat, or a tight collar, will produce congestion of the brain; for the veins, having but little forcing power at their base to propel the blood back to the heart, are the first to feel such impediments and compel the blood to accumulate. Here the cure consists in simply removing the cause.

Professor Coleman considers that these disorders take their rise from over-distention of the stomach. He was once consulted about some horses, among which there had been a strange mortality, and he found that they were in the habit of continuing at work for ten hours together, during the day, and on their return home at night were abundantly supplied with food. The professor soon discovered the source of the evil, and ordered, for the future, that the horses should be fed in the middle of the day also, by means of nose-bags, which, salutary practice put the disease to flight.

The known sympathy existing between the stomach and the brain justifies us in attributing many of the diseases of the latter to stomach origin.

MANURE FOR FRUIT TREES.—Dr. Kennicott, speaking of the fertile lands of northern Illinois, says, "For fruit trees, especially the apple and quince, I have found barn-yard manure, half-decayed chips, charcoal, and ashes, [mixed] serviceable. I have tried lime, but except on a small peaty spot, without benefit. Mr. Dunlap says he has killed apple trees with ashes—perhaps he gave them too much. I have found them decidedly serviceable."—Yard manure alone is not recommended for that region, and for peaches, plums and cherries, is considered positively injurious.

San Francisco has now as large a population as New York had in 1800.

NATURAL HISTORY

The Hawk Family.

BY P. R. HOY, M. D., OF RACINE, WIS.

The Hawk Family comprises Eagles, Hawks, Buzzards, Kites, &c. They are bold, sanguinary birds of prey; armed with strong hooked beaks, sharp and formidable claws; their flight powerful, swift and sustained; capable of great endurance; they can fast for several days without suffering any apparent inconvenience. Their drink usually, is the blood of their victims, and like the "votary of intemperance, water to quench thirst is only a *last* resort." Vision in these birds is wonderfully acute. The female usually a third larger than the male. Nature, as if to limit the number of these malignant free-booters, bestows upon them but one brood, numbering usually only two — never more than four. The greater number nest in the clefts of inaccessible rocks, or on the summit of the tallest trees. The plumage of the young differs remarkably from the old.—They seldom acquire the fixed livery of age until the third or even the sixth year.

There are about 27 species of the *falcon family* found in North America, 18 of which we have seen within a few miles of Racine, viz:

Golden Eagle,	Cooper Hawk,
Washington Eagle, (a doubtful specie.)	Slate Colored Hawk,
White-Headed Eagle,	Swallow-Tailed Hawk,
Fish Hawk,	Rough-Legged Falcon,
Duck Hawk,	Red-Tailed Hawk,
Pigeon Hawk,	Common Buzzard,
The Merlin,	Broad-Winged Hawk,
Sparrow Hawk,	Red-Shouldered Hawk,
Gos Hawk,	Marsh Hawk.

The principal office these birds perform in the economy of nature, is to keep in check, the undue multiplication of quadrupeds and birds. This *kind office* is sufficiently executed by man, in all settled districts; consequently we can dispense with their *labor of love*, and as I can offer no plea of justification in their behalf, we will permit the exterminating warfare, universally waged against the hawk tribe, to go on unrestrained.

I am desirous of procuring eggs of all kinds of Hawks, Owls, Cranes, Bitterns and Curlews.—The eggs should be emptied, by picking two small holes and blowing out the contents; after drying they should be packed in dry cotton. Each egg to be numbered, and a note accompanying them, with the name of the bird and a description of the nest—if on a tree, what kind and how high from the ground—if on the ground, in what position, and of what composed.

If my young readers will assist me in procuring any of these eggs, and send them to me at Racine or, if more convenient, deposit them at the Farmer office in Janesville, I will liberally reward them for their trouble.

Hibernation of Insects.

Toward the close of autumn the whole insect world, particularly the tribes of beetles, is in motion. A general migration takes place; the various species quit their usual haunts and betake themselves in search of secure hybernacula.*—Different species, however, do not select precisely the same time for making this change of abode.—Thus many lady bugs, field bugs and flies, are found out of their winter quarters even after the commencement of frost; while others make good their retreat long before any severe cold has been felt. The days which they select for retiring to their hybernacu'a are some of the warmest days of autumn, when they may be seen in great numbers, alighting on walls, rails, pathways, &c, and running into crevices and cracks, evidently in search of some object very different from those which ordinarily guide their movements.

The site chosen by different perfect insects for their hybernacular is very various. Some are content with insinuating themselves under any large stone, a collection of dead leaves or the moss of the sheltered side of an old wall or bank. Others prefer for a retreat the broken or ivy-covered interstices of the bark of old trees—the decayed bark itself, especially that near the roots—or bury themselves deep in the rotten trunk; and a very great number penetrate into the earth to the depth of several inches. The aquatic tribes burrow into the mud of their pools. In every instance the selected dormitory is admirably adapted to the constitution, mode of life, and wants of the occupant.

*Winter quarters.

AMERICAN INSTITUTE.—The following are the receipts and expenditures of the Annual Fair of the American Institute, for the last ten years:

Year.	Receipts.	Expenditures.
1842	6,740	5,825
1843	8,808	6,242
1844	10,259	7,484
1845	12,600	8,683
1846	14,312	10,225
1847	15,275	9,664
1848	17,546	13,031
1849	18,770	11,244
1850	22,418	16,159
1851	21,022	16,000

The annual report of the Institute makes a volume of near 500 pages.

The importations of tea into the United States during 1851 amounted to $4,798,004, whereof was exported $1,129,074, leaving for consumption here $3,668,141. Coffee imported, $12,851 070, re-exported, $336 000, leaving for consumption $12,515,070. Wool imported, $3,833.160. re-exported, $7,966, leaving for consumption $3,825,194 The importation of wool in 1850 was valued at $1,681,000, showing an increase in the value of the importation the last year of over two millions of dollars.

EDITOR'S TABLE.

PLOWING.—We wish to get 10 or 15 acres of hazel bush land broken up. The bushes are cut close to the ground and cleared off. It may be plowed immediately. Who wants the job? Enquire at the Farmer office.

POTATOES.—We want a few bushels of early and late potatoes for planting. Who will fetch them along?

GALE'S WISCONSIN FORM BOOK.—The third edition of this valuable assistant to business men, is on hand and may be obtained at the Farmer office. It has been much enlarged, and revised so as to conform to the revised code. It is handsomely printed and bound in substantial style. There is no book calculated to be more useful to lawyers, justices and business men of all classes; as it contains every form for all legal instruments wanted for use, in this state, together with the school law, and state constitution.

At a Farmers meeting in the Town of Harmony, held at the place of holding town meetings, on Saturday, March 27th, 1852, Geo. Wilbur, Esq., was called to the chair and C. R. Gibbs appointed secretary.

The object of the meeting was explained by J. P. Wheeler, Esq., to be the formation of a Town Agricultural Society.

Whereupon, it was resolved to form such society. A constitution was adopted. L. E. Stone was elected President; Geo. Wilbur and Wm. Spaulding, Vice Presidents; Jos. Spaulding, Treasurer; T. P. Davies, Sec'y. L. E. Stone, C. R. Gibbs and P. Schmitz were selected, each to read an essay at the first quarterly meeting to be held on the Saturday before the last Monday in May next, at 1 o'clock, P. M., at the same place.

The society already embraces some thirty members and will soon reach one hundred, and we hope by another meeting to send in one of the longest lists of subscribers to the Wisconsin & Iowa Farmer. C. R. GIBBS, Sec'y.

STEAM MARINE OF THE U. S.—Many will be surprised to learn the magnitude of the steam marine of the United States. By a resolution of Congress, at its last session, the Secretary of the Treasury was required to report the official statistics of the steam marine, both external, internal, travel, &c. Two commissioners were appointed by the secretary to obtain the desired information. To one was assigned the Gulf of Mexico, Atlantic and Pacific coasts; to the other the lakes and rivers.

The Secretary of the Treasury has recently transmitted his report to Congress, from which we make up the following aggregates:

EXTERNAL STEAM MARINE.

Ocean Steamers	96
Ordinary Steamers	382
Propellers	67
Ferry boats	80
Total number of boats	625
Total tonnage	213,500
Officers and Crew	11,770
Passengers during the year ending July 1, 1851	33,842,846

During the year there occurred 328 shipwrecks, of which 278 were lost by tempest, 14 by fire, 15 by collision, 19 snagged and by explosion. Lives lost, 318.

The number of passengers upon some of the principal lines of travel were as follows:

On Long Island Sound	302,597
On the Hudson River	995,100
New York and Philadelphia	840,000
On the Potomac and James Rivers and Chesepeok Bay	422,100
On the Gulf of Mexico	169,209
On the Pacific coast	79,209

INTERNAL STEAM MARINE.

This comprises three grand divisions—the northern frontier; the Ohio Basin and the Mississippi valley.

Northern frontier Steamers	164
Ohio Basin "	348
Mississippi River "	353
Total,	765
Northern Frontier Crew	2,855
Ohio Basin "	8,338
Mississippi River "	6,414
Total,	17,607
Northern Frontier Passengers	1,513,390
Ohio Basin "	3,469,997
Mississippi River "	882,593
Total,	5,860,950

The losses on the lakes and rivers, during the year ending July 1, 1851, were 115 boats—35 by fire; 18 by collision, 32 by snags. Lives lost 695, of which 67 were on the lakes and 628 on the rivers.

The steam marine of Great Britain and her dependences, is set down at 1184 steamers, with a tonnage of 142,080 tons. While the aggregate of that of the United States consists of 1390 steamers with a tonnage of 427,113. From comparison it will be seen that the steam marine of the United States exceeds that of Great Britain in number of vessels, 206; and in amount of tonnage, 285,033 tons.

THE EFFECTS OF GLASS ROOFING ON TREES.—From the report of the gardener to whose care the trees of the Crystal Palace in London, were entrusted, it seems that the old elms under the glass shade, so far from being injured by their confinement, have increased in their branches from six to seven feet, whilst the elms in the park have made, on the average, only one foot of shoots.

OREGON LAND GRANTS—*What Settlers Acquire.*—The report of Commissioner Butterfield states a fact in relation to the grant of land to settlers in Oregon by the law of 1850 that those westwardly inclined should remember. Single actual settlers previous to Dec. 1st, 1850, were granted 320 acres; if married 640 acres; one-half to the husband and the other to the wife, in her own right. Actual settlers between the 1st of Dec. 1850, and 1st Dec. 1853, are granted 160 acres if single men, and if married 320 acres, one half to the wife, in her own right.

PROGRESS OF THE UNITED STATES IN LAND AND POPULATION.—The following figures present, in a small space, an impressive picture of the progress of our country during the last half century :

Year.	Area Square Miles.	Population
1800.....	739,000	5,395.922
1816.....	1,869,000	8,000,000
1830.....	1,929,000	12,855.820
1842.....	2,370,000	17,063.352
1849.....	2,695,000	20,000.000
1851.....	3,220,000	24,000,000

☞ It is said that the nutmeg is indigenous in California. The editor of a Sacramento paper lately received a fine specimen, with the assurance that it grew on a native shrub.

PLENTY OF LAND.—The commissioner of the general land office reports that 12,000,000 of acres of the public land will be available for sale during the present year. The minimum price is $1,25 per acre.

MORE RICHES IN THE BOWELS OF THE EARTH.—A chemist of the city of New York received for examination a few days ago a crystal of pure sulphur, the owner of which, would give no information about it, except that it was found on the banks of a navigable stream in South America, and that hundreds of tons like it, could be got by a little digging.

Theory is the guide of practice, and practice is the life of theory.

A LARGE ONE.—There was lately exhibited in London a pumpkin measuring six feet in circumference, and weighing about one hundred and fifty pounds. It grew from seed sent from Canada.

Slavery was to be entirely abolished in the Republic of New Grenada, on the 1st inst.

BOOK NOTICES.

THE WORKING FARMER.—The March No. is before us, rich as usual in its amount of practical and scientific matters, adapted to the wants of agriculturists. This valuable journal has just commenced its 4th vol. and abundantly merits the liberal support it receives. To those who seek scientific knowledge and its practical application, we would say subscribe at once for the Working Farmer. Fred. McCready, publisher, Broadway, N. Y. Proff. J. J. Mapes, editor. $1,00 per year.

LITERARY MISCELLANY.—The March No, is on our table, unusually rich in interesting articles.—Its popularity is deservedly increasing. Detroit, Beecher & Quinby, 1,00.

"Remarks on Entomology, chiefly in reference to an agricultural benefit, by Dr. Wm. D. Brinkle." We are indebted to some unknown friend, for a copy of a small pamphlet with the above title, the contents of which we shall notice hereafter, and make some extracts for the benefit of our readers.

WATER CURE JOURNAL.—Devoted to physiology, hydropathy and the laws of life, is published monthly by Fowlers & Wells, N. Y., at the low price of $1,00 per annum, for single copy, 5 copies $4,00. Through the politeness of its spirited publishers, we are in receipt of the March No. of this able and earnest advocate of a noble reform. Its influence is already powerful and widely felt throughout our land. The high esteem in which it is held by this community, may be known by the fact, that between 50 and 60 copies are regularly distributed to subscribers in this village, by Orin Guernsey, Esq., the agent.

AMERICAN PHRENOLOGICAL JOURNAL.—Devoted to science, literature and general intelligence, is beautifully illustrated with numerous engravings. We wish this work, might be a regular visitor in every family in our land. It is emphatically a journal for the people; containing as it does matters of important interest to all branches of the home circle Friends of human progress will help to circulate this work. Published in N. Y. by Fowlers and Wells at 1,00; clubs of 20 or more 50 cents.

THE STUDENT.—A monthly miscellany devoted to the physical, moral and intellectual improvement of youth. Edited by N. A. Colkins, and published by Fowlers & Wells, N. Y. We have received the Feb. and March No.'s of this periodical, and cheerfully commend it to those parents who wish to place in the hands of their children, a work which will instruct and elevate, as well as entertain their minds, at the same time exerting a healthy moral influence in the family. $1,-00 per year in advance.

THE AMERICAN PRESIDENTS—Their characters and developments with portraits and biographies. This is another of the numerous issues teaming from the press of Fowlers & Wells, N. Y. A neatly illustrated and exceedingly interesting work.

THE CHILD'S PAPER.—Published in N. Y. by the American Tract Society. Such is the title of an exceedingly neat little paper to be published monthly as above. We bid the enterprise "God speed" and hope for abundant success for it. It ought to be in the hands of every child in the land Ten copies for $1,00 if sent to one address.

THE OHIO FARMER AND MECHANICS' ASSISTANT.—A weekly paper devoted to agriculture, horticulture, the mechanic arts, literature and domestic economy, social improvement and general intelligence. It contains matter interesting to all classes of readers, and we cheerfully recommend it as a family journal of high character From the ability displayed by its editors and publishers, we have no doubt its present superiority will be well maintained.

Thomas Brown, Publisher, Cleveland, Ohio.—Terms; single copy $2.00, two copies $3,00.

The Journal of the N. Y. State Agricultural Society for March is received.

THE SCHOOL MATE.—"A monthly reader of 32 octavo pages, designed for school and home instruction of youth." A. R. Phippin, editor; George Savage, 22 John St., N. Y., publisher. Single copy $1,00, 6 copies $5,00. We commend it to the attention of parents and teachers. And will give a more extended notice hereafter.

MOORE'S RURAL N. YORKER.—A well established weekly paper published at Rochester, N.Y., for the low price of $2 per year to single subscribers, and a liberal discount to clubs. Devoted to agriculture, horticulture, mehanic arts and science, education, rural and domestic economy, general intelligence, markets, &c., &c. We commend *all* who wish for a family journal to subscribe for the Rural New Yorker at once. It is one of the best papers in the country and is conducted with great ability. Mr. Guernsey of this village is agent and will receive subscriptions at club prices. See prospectus on cover.

ACKNOWLEDGEMENTS.

PREMIUM LIST.—We have received from Albert C. Ingham, Esq., Secretary Wis. Agricultural Society, a copy of the premium list and regulations for the next state fair. We shall refer to it hereafter, and publish such portions as are of general interest and our limits will admit.

We tender our acknowledgements to Julius Nettleton, Esq., of Riga, Monroe co., N. Y., for a package of cucumber seeds which he has kindly forwarded us. They are of the snake variety and he informs us, that one he raised in his garden in 1850, grew to the enormous length of 5 feet 4 inches. If such cucumbers can be raised in old Monroe, why, of course, we must expect nothing short of a ten footer here in Wisconsin.

Our thanks are due to J. Mathews, Esq., of Burlington, for a generous package of choice garden seeds, which at this time are peculiarly acceptable. We are happy to chronicle such favors, as showing a good spirit on the part of our brother farmers, to encourage and aid us in our humble efforts in behalf of agriculture. These seeds from Mr. Mathews we prize highly, because he has given much attention to the cultivation and improvement of fruits and vegetables; and we are confident he would send nothing but what is intrinsically valuable. Let us have more of this class of pains-taking farmers, in our state, and the fruits of their labor, will tell astonishingly in giving an agricultural character to Wisconsin.

HALF BARREL OF WHITE FISH.—Last, but by no means least, is a half barrel of white fish, generously bestowed upon us, by James G. Strang, Esq. (head man of the Mormon Settlement,) of Beaver Island; for which we would tender to the donor, our grateful acknowledgements and most profound thanks. For fatness and richness of flavor we have never tasted their superior. Such a gift is really among the substantials, and it does us good from the bottom of our stomach, to render due thanks. Wish we had a few more such friends; we could then "read our title clear"—through hard times. Whether the inhabitants of Beaver Island are able to supply the market to any extent, we are not informed; but if they *can*, with such fish as those sent to us, we recommend our friends in want of the article to give them their patronage.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., MAY, 1852. NO. 5.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER,

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For each subsequent insertion	75

OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

For the Wisconsin & Iowa Farmer.

Cultivation of the Ozier in Wisconsin.

RACINE, April 24, 1852.

MR. MILLER, ESQ.—In the fall of '49 I purchased of Col. Bement, the owner of the farm near Albany, N. Y. known as the Judge Buel farm, one thousand cuttings varying from 5 to 8 feet in length. In May '50 I divided them into slips of ten or twelve inches in length and set them six inches apart, in rows about three feet distant, putting them in the ground about 8 inches. In the spring of '51 they had become well rooted and had grown from one to three feet high. I then cut them off within four inches of the ground and set the cuttings on places where they had died out the year before, and on new grounds. I now have one acre of them. Their growth last year was from five to eight feet.

I designed last fall to have cut, peeled, and sent them to N. Y., where they are worth from five to eight cents per pound; but at the time of cutting, which is when they will peel readily, I was obliged to go east, and did not return till it was too late for them. Through the winter I have cut some, and without removing the bark, have made some corn baskets which were readily disposed of in market. For the sake of experiment I put some into boiling water about fifteen minutes, which caused the bark to slip off easily, and of these some small handle, and clothes baskets were made, which always find a ready sale. The rest of them I shall cut, as soon as the sap starts so they will peel, and send them to New York, to see what can be done with them. If a regular manufacturing establishment could be started in this—our state—to make up all that would be grown and so supply the state with baby wagons, baskets and fancy work, instead of having them bought in N. Y., of importers, it would add much to our wealth.—(And the same can be said of many other articles, for which we are sending our spring wheat east, at the low price of thirty or forty cents per bushel.) Until such an establishment is started, I think more can be made by sending them to an eastern market, than for the grower to undertake to manufacture them, without *that* knowledge of the business which it is necessary to have, to make it profitable. To make it any object to our merchants to buy them, a large quantity should be grown, as they would not wish to bother with the growth of a *few* acres.

You perceive that of my own knowledge I can not give any information as to the profitableness of raising it, as I have not yet got through with the first crop. Col. Bement had a quarter of an acre. The first year he sold the cuttings to a German for ten dollars. After that he sold them standing every fall for $75. Happening to be in New York, and seeing some that was imported, he obtained enough for the growth of a square rod and on his return home, prepared it according to directions given. From this he made the following estimate: He dried and then weighed, and found that at the price it was selling in N. Y., the growth of an acre would produce the enormous sum of fourteen hundred dollars. I do not expect such profit, but am well satisfied that it will be quite a valuable product. I will send you a few cuttings by stage, as you requested, and will supply those who wish, up to the 15th of May, at $1 per hundred. Next fall I will be able to supply most any required quantity at that price. Six or eight shoots will start from a single cutting, and after the first year, can be cut annually, and will grow from 5 to eight feet each year. They will flourish on any soil but low land is best adapted to them. Mine are on a piece of wet prairie, but not so wet as to prevent the use of the cultivator in removing the weeds. If they are in a pasture they will not need fencing, as cattle will not disturb them.

When I get returns from those I send east, I can make an estimate of the expense of cultivating and preparing for market, from which I can estimate what will be the profits of an acre. And will then inform you of the same.

Respectfully Yours, F. P. BAKER.

May Work in the Kitchen Garden.

As no farmer's family can be truly said to *live*, who are destitute of this source of pleasure and profit, we continue our remarks upon the various vegetables which should receive attention during this month, hoping thereby to stir up our brother farmers to a timely performance of the duties of this branch of their calling; assuring them, that faithfulness in the discharge of seasonable garden labor, will yield more profit and luxury than any similar labor spent upon other parts of the farm. In our last we gave some directions for selecting and sowing seeds, we propose now to speak of some varieties which should receive attention this month.

Egg Plant is grown like a tomato. The plants should be started in a hot-bed before putting out in the garden, for the seed will not vegetate freely without substantial heat. Transplant early in June, into rich warm ground. Set the plants 30 inches apart. Repeated sowings are often necessary. Plant Cucumbers and Melons, and for these a *new sod* on a sandy soil is undoubtedly far better than old soil, and hog manure is the best enriching substance. When the soil is old, and compost is used, leaf mould should form an ingredient mixed with salt, lime, and ashes, wet down with urine or soap-suds. This dressing will almost always insure a good crop. When the plants are up examine them closely for the yellow bug or fly. To prevent the ravages of these pests, take soot, ashes and ground plaster—equal parts of each, well mixed—and dust over the plants. If the plants are dry, sprinkle them with water before dusting them. Nip off the first runner bud of cucumbers and melons, and they will become more stocky and fruitful.

Sow lettuce in a mellow soil, and allow it to grow very thick as it is more tender than when grown thin. It may be constantly thinned for use. Those intended for large heads should stand 8 or 10 inches apart.

Radish—Dig the soil deep, manure well, and sow once in two weeks for a succession of crops.

Peppers—Sow on a warm soil the last of this month, or if you have started them in a flower-pot or hot-bed, transplant as soon as danger of frost has past. It is a tender plant and requires care.

Vegetable Oysters.—The roots are boiled like carrots as a vegetable dish; or after being parboiled, made into cakes with paste and fried like oysters, which they closely resemble in flavor.—Cultivate in all respects like the carrot.

Spinach—Sow immediately, remembering that the ground cannot be too rich, and the stronger the soil the more succulent will be the leaves, and of course the more delicate and tender.

Okra or Gombo.—This is one of the best and most wholesome of vegetables. Plant the last of this month in *very* rich ground, in hills two or three feet apart Sow the seed very thick, as it is liable to rot in the ground and this precaution is necessary to insure the requisite number of plants.—Two or three plants are sufficient for a hill. This plant is much used for soups and from its peculiar mucilaginous qualities seems intended by nature to guard the stomach against the ill effects of a summer temperature. Like sweet corn it must be plucked in its "milky state" or it is not fit for use. A day too old and it is worthless, as its peculiar excellence is lost. It can be dried for winter use. and is equally as good as in its green state. At the proper season we will give the mode of drying.

Parsley.—Sow immediately in rows or beds. It is best to soak the seeds in warm water, some hours before sowing, or they will often lay two or three weeks in the earth before they will vegetate; eaten green, it counteracts the offensive odors of onions in the breath.

Nasturtium.—Is both useful and ornamental.—Sow the middle of this month. Flowers and young leaves are used as salad. Seed pods with foot stalk are gathered while green, and pickled as a substitute for capers which they much resemble.

Peas.—Sow a few rows once in two or three weeks for a succession of crops.

Beans—Should also be sown as soon as danger of frost has past. Except English dwarfs, which may be sown immediately, as they will bear the cold better than extreme heat.

Aromatic and sweet herbs should be sown from the middle to the last of the month, using caution in covering the seeds too deep.

For the Wisconsin & Iowa Farmer.

How to Raise Onions and Cabbages

Mr. Miller—Having seen a number of pieces in the Wisconsin & Iowa Farmer on the best way to raise onions and cabbages, I have thought I would give your readers a little of my experience on the same subject. I have for a number of years tried various ways, and at last hit on this plan:—I sowed two rows in my garden; one I trod down hard, by walking over it a number of times; the other I left untrodden, and in the usual manner. I have always found those I stamped down hard, to be sound good sized onions, while those untrodden would be half scullions or worth but little.

But the best way to raise onions, is, to select your ground in the fall and prepare it for a crop by manuring and plowing it, thereby thoroughly pulverising and mixing the soil and manure together, then roll the land down hard and leave it till spring. As soon as the ground is fit to sow, rake it over with an iron tooth rake—sow your seed and rake it in; you will have no more trouble with them, unless it be to pull up a few weeds, till

they are fit to harvest. This method always proves successful with good seed. Try it.

CABBAGES.—For a number of years I met with almost an entire failure, until I tried the plan of raising my own seed. In the spring I set out cabbage heads, (instead of the mere stumps as is usual,) when the sprouts come out through them I cut off all but two or three sprouts, which I allow to go to seed, and when they are ripened gather them before they fall out—keep them in a dry place till spring. When it is time to sow, prepare your ground. Sow, rake in, and when of a suitable size transplant them into hills about a foot apart; with proper care you will not fail to have a good crop.

D. FARRER.

Bradford, Wis., April 20, 1852.

For the Wisconsin & Iowa Farmer.

Corn Planter.

MR. EDITOR—I intend now to try to redeem my promise concerning the Drill. Well, I have spent several hours, endeavoring to represent or draw it, but I cannot do it to my satisfaction; therefore, I will endeavor to make you understand it by words.

Prepare two light wheels, 3 feet in diameter; put them on to an iron axle an inch square, so that they will carry the axle around with them as they go forward, and not turn it if they should want to turn backward, (as in turning at the ends). In the center of this axle put a solid wood wheel, 9 inches in diameter, with three pits made in it, like a sugar scoop; large enough to hold 4 grains of corn, put a box over it to hold the seed with a slide, *b*, to regulate the seed; now put a light frame to it with a coulter about 3 feet ahead of the wheels and she will stand without any legs—The coulter I thought would be better than the plow. Other little fixings must be put such as conductor for the seed to fall to the ground in.

I send you the following recipe for manufacturing a beautiful chemical soft soap. It is as white as milk curd, and looks more like it than any thing else I can compare it to:

Bar soap 14 lbs.
Sal. soda, 3 lbs.
Fine rosin, 1 lb.
Borax pulverised, 2 oz.
Salt, common, 8 oz.
Spirits Turpentine, 4 oz.

Mix in 5 gallons rain water and boil until dissolved, then add 26 galls. rain water, cool, skim, stir well, and set it away until cold.

Yours, E. PHILLIPS.

Mineral Point, April 1st, 1852.

Bloody Milk.

I noticed in your paper of the 1st inst., an inquiry for a remedy for "bloody milk." It is not an uncommon disease, and is not difficult to remedy. My plan is as follows: Take three or four pieces of the dried root of "garget," as it is commonly called; pulverise it and mix with a quart or two of bran or Indian meal, and give it to the cow. If she has been used to messing, she will eat it readily. Administer the like mess to her every fourth or fifth day, till the symptoms disappear, which will be the case in two weeks, or less. If you cannot readily procure the root in a dry state, dig up th green root and cut it into pieces about four or five inches in length, and with a piece of thread confine it to the root. Cram it into the cow's mouth and hold her with her nose elevated till she chews and swallows it. In its green state it requires about double what would be required when dry. It is an infallible cure for almost every disease of the glands of either horned cattle or horses.

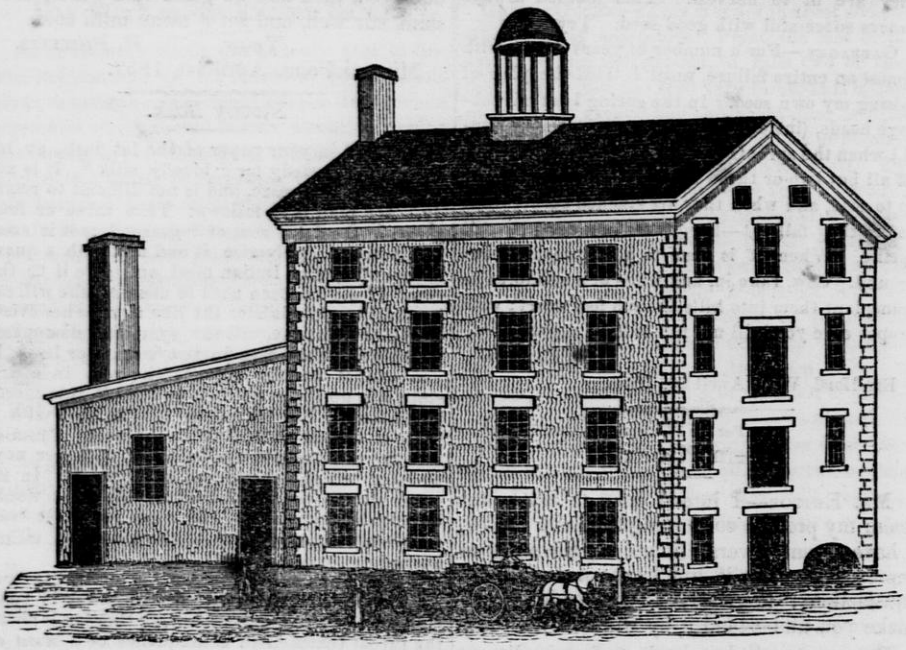
The same remedy, if seasonably applied to horses which have been afflicted with what is commonly called the horse-ail, having the glands about the throat tumefied in consequence of a want of suppuration, would save hundreds of horses yearly from that fatal disease called the glanders. I have watched the favorable effects of that valuable root upon the diseased glands of cows, oxen and horses, with the highest gratification, for more than half a century. Mr. Upham, your correspondent, is invited to try it and give the results of the remedy in your valuable paper.

[Cor. N. E. Farmer.

SALT FOR FARM STOCK.—That salt is beneficial to domestic animals, seems to be universally admitted. We have abundant evidence that it tends to preserve health and even restore it, when it has been impaired. Its effects upon the animal system are believed to be uniform upon man and beast. What then is the form in which *we* prefer it? With our daily food. Why is it then equally grateful and beneficial, if administered daily to our cattle? If at all times accessible they will never take it to excess; at least we have never known them to do so. It should be placed in troughs or boxes under cover where the stock can have daily access to it.

PECULIARITIES OF THE DESERT.—It is curious to observe the prevalence of the sandy color of the soil in the creatures that have to exist upon it. Sandy-colored eagles devour sandy-colored vipers and lizards which in their turn prey on grasshoppers of the same complexion; and partridges and sparrows, by means of their resemblance to the ground, avoid the prying eyes of the falcons and hawks.

[Melly's Khartoum and the Nile.



Janesville Woolen Factory.

This building was erected in 1850, by Mr. F. WHITTAKER, of this place. It is a substantial stone structure, four stories high, of sufficient capacity for three sets of machinery. Two sets are now in operation, as heavy and well built as could be obtained; designed to do all kinds of custom work; such as roll carding, cloths dressing, manufacture of flannels, blanketing, tweeds, satinets, plain cloths, cassimeres and broad-cloths of nearly all descriptions. The mill in its present condition, is capable of working 50,000 lbs. of wool per annum. Mr. WHITTAKER employs the best of eastern workmen, and turns out a fabric unsurpassed by any other establishment. He works wool upon shares for customers, exchanges cloths *for* wool, bys wool, and sells cloths low, at wholesale or retail.

Here is presented an excellent chance for farmers to get their wool manufactured, or to exchange it for such cloths as they may want for domestic use at fair prices.

WHO SHALL TEACH US?—Agriculture is both a science and an art. All other sciences are dependent upon it. From it they spring, and live and grow. Without it they could not exist. And yet among a people of twenty-five millions, and eminently an agricultural people, whose prosperity and future greatness depend upon their success in this pursuit, there is not an institution exclusively devoted to agricultural knowledge.—Which state shall lead this way.

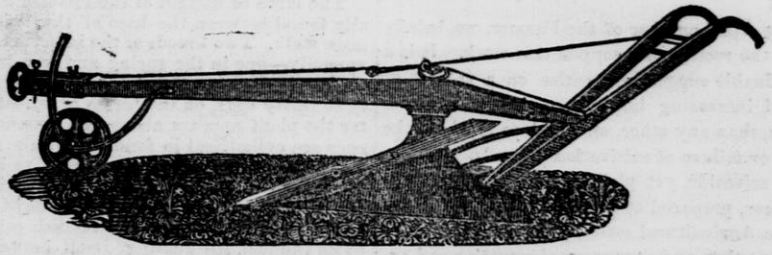
[Lou. Journal.

COMMON SENSE VERSUS NONSENSE.—Dr. F. Tut hill delivered an address the other day before the Agricultural Society, of Suffolk county, N. Y., and in the course of his remarks he touched upon "the false shame of labor," in the following manner:

"The day has already come in our cities that if a man, stout as Milo of old, has a load of wood brought to his door, and he really aches for the pleasure of handling it, yet must he hire a man to pitch it into the cellar, while he stands idly by, nor so much as touch a stick of it, on pain of losing caste. If a stout and vigorous citizen, whose muscles swell with an excess of strength, has a load of wood lying on the sidewalk, he may as well hang himself at once, as be foolish enough to save a dollar and saw it up himself; yet if the man has pitched it in, and the grate is down so that he shall not be seen, we are not sure but he may saw on till dooms-day, and no one esteem him less a man and a gentleman. If he curry and tackle his own horse, or lead him to the stable when he has done with him, he is unpardonably vulgar. He would no sooner be caught carrying a trunk the length of a block to an omnibus, than stealing a body from a graveyard; yet he will boast among his friends of the enormous weight he carries in the gymnasium, having paid a fee of thirty dollars a year for the privilege. And his friends applaud his gymnastic expenditure as wise and exceedingly judicious, 'for sure,' they say, 'how can a man live without exercise?' In short, labor that promotes the ends of economy, is an abominable thing—that which advertises their imbecility is a source of pride. These soft-handed gentry may be our sons and brothers, but fancy they must at times feel ashamed of our common father, old Adam, who farmed it in Paradise.

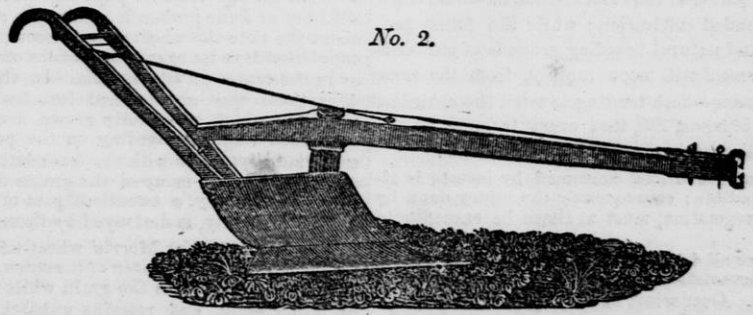
J. M. MAY'S PATENT DOUBLE OR TRANSFORMABLE PLOW.

No. 1.



Engraving No. 1, represents this plow in the proper form for breaking prairie with one span of horses. The foundation of the plow is made of boiler iron, making it very light and cheap, yet strong, because an edgewise strength of the plate is obtained. The steel share is fastened by two bolts and the furrow turned by means of rods of about 5-8 inch diameter. The coulter is unlike anything hitherto made for that purpose. It is of a plate of steel about 2½ inches wide ; ¼ or ⅜ inch in thickness and about three feet long. The opposite edges of each end, for about one third of its length, is brought to an edge. A single bolt fastens it to the plate post, placing it in an acute angle relatively with the base of the landside, and when one end is dulled by use it is reversed and the other end is presented for use. Each end of this coulter has about twice as much cutting edge as the common one ; or four times the cutting edge of those in common use. This great amount of cutting edge —the position of the coulter—the lessening of friction by using properly adjusted rods to turn the furrow and the lightnesss of the plow makes the draft exceedingly light, so that a span of horses often break *from one-and-a half to two* acres per day.

No. 2.



Engraving No. 2, shows the same plow with the rods, share wheel and coulter removed and a mould-board applied. This mould-board may be of any required size or form.—It requires but a few minutes to make the change and is then ready for cross or stubble plowing.

These plows are certainly a great novelty, and they are spoken of in the highest terms by those who have used them. Only about one hundred of them have yet been made and they give the highest satisfaction. One intelligent and practical farmer says: "I find these plows draw about *one-fourth easier* than any others I have used"—and adds "the two pointed coulter is very perfect and I would use no other."

Another practical farmer after expressing his high admiration of these plows, says, that "*the economy of buying two plows in one* is no small consideration. We can but express our satisfaction in finding, in the west, capital and skill employed so successfully in cheapening and improving so indispensable an implement as the plow.

☞ The good farmer wears russet clothes, but makes golden payments, having tin in his buttons, and silver in his pockets. In his house he is bountiful, both to strangers and poor people. He seldom goes far abroad, and his credit stretches farther than his travel.

☞ There are no gains without pains.

"Remarks on Entomology,

"Chiefly in reference to an agricultural benefit—By Wm. D. Brinckle, M. D.," (of Philadelphia.)

In the April number of the Farmer, we briefly noticed the receipt of a copy of this work. It is a most valuable suggestive treatise on a subject of vast and increasing importance, less understood, perhaps, than any other, on which so much of the success or failure of cultivation depends.

This scientific, yet plainly written paper. was we believe, prepared at the instance of the Pennsylvania Agricultural society; and is intended to excite enquiry, and encourage observation and experiment, in regard to the destructive insects of our country; which are now increasing, with such fearful rapidity, as to threaten the entire abandonment of some products, in certain places. We think that Dr. Lee puts the annual loss to our agriculture, from insects alone, at 20 millions of dollars—and his estimate is, doubtless, below the mark.

In the extended extract which we make from these interesting "Remarks," it will be seen that the learned doctor puts down the "wanton destruction of birds and reptiles" as a principal cause of the increase of noxious insects. We fully agree with our friend, in this statement—tho' we think that an increase of the proper food, and breeding places of the insect tribes, have increased with extended cultivation; while the forest protection, and natural breeding grounds of our birds have *decreased* still more rapidly, from the same circumstance—both tending to swell the countless millions of insect life, that every teeming second gives to the work of vegetable destruction:

The amount of food consumed by insects is almost incredible; consequently the injury done by them to vegetation, must at times be exceedingly great.

You are all familiar with the appalling accounts of the devastation committed by the Locusts of the East. Occurring, as they often do, in cloud-like swarms so dense as to obscure the light of the sun, it is not surprising that they should, in so short a period, destroy every vestige of vegetation where they alight; and that their course should frequently be followed by famine and pestilence. Fortunately for us, this insect-scourge has never visited our western hemisphere. Belonging, however, to a closely allied family of the same Orthopterous order are the grasshoppers, many varieties of which are common to this country, and at times do no small injury to vegetation.

Other insects of a different order often commit extensive ravages on our staple crops.

Wheat, so essential in its diversified forms of manipulation to our comfort and sustenance, and constituting what is emphatically termed the staff of life, is subject to the depredations of many insects. Some of the most destructive of these are the Hessian Fly, (Cecidomyia destructor,) the Orange-colored Gnat, (Cecidomyia tritici,) Miss Morris' wheat midge, (Cecidomyia culmicola,) the Joint-worm, the Augoumois moth, and the Wolf, (Tinea garnella). These insects are pernicious only in their larva state, and each attacks a separate and distinct part of the plant.

The larva or maggot of the Hessian Fly is usually found between the base of the leaf and the main stalk. Two broods of the insect are produced annually—one in the spring and one in the autumn. In October, the female deposits from twenty to thirty eggs, on the leaves of wheat, soon after the plant appears above the ground. These eggs are cylindrical in form, of a pale red color, one-fiftieth of an inch long, and one-five-hundredth of an inch in their transverse diameter. They are hatched in from four to fifteen days. The diminutive maggot, at first of a reddish color, crawls down the leaf, insinuating itself between it and the main stalk, till it reaches a joint, where it remains, with its head downwards. It continues stationary in this situation, *sucking the juices of the plant*, for four or five weeks, when it becomes grown, measures an eighth of an inch in length; and ceases to eat. The skin now hardens, assumes a bright chestnut color, and has some resemblance to a flax-seed. In this flax-seed or pupa state it remains till April or May, when it becomes transformed into the perfect or winged insect. Copulation then takes place, soon after which the eggs for the autumn brood are laid.

The larvæ of the Orange-colored Gnat are found in the ears of wheat; where they feed on the pollen, and the germ destined to form the future grain, till they complete their growth. Then, after moulting, they fall to the ground, where they burrow to the depth of half an inch and undergo their final metamorphosis. The perfect insect does not emerge from its pupa case in the ground till May or June; when it makes its appearance about the time the wheat is in blossom, and after copulation lays its eggs in the scales of the florets or in the center of the corolla. In eight or ten days, these eggs are hatched into little footless maggots; which, when fully grown, are an eighth of an inch long. By feeding on the pollen, they essentially interfere with the fecundating process, and thus occasion many of the grains to be abortive. In this way, a twentieth part of the crop, not unfrequently, is destroyed by them.

The larva of Miss Morris' wheat-midge inhabits the cavity in the center of the straw. In June, the egg is deposited in the grain while in the soft or milky state, and remains unhatched till the wheat has been sown and has germinated. The young larva soon ascends the stalk, which it penetrates above the top joint, and enters the cavity in the center of the culm, where it feeds, with its head downwards, till it acquires its full growth.—It then passes down the center of the straw, cutting through the joints, till it reaches the root, when it emerges from the interior of the culm, ascends the stalk on the outside, attaches itself firmly to the straw, passes into the flax-seed or pupa state in its larva skin, and completes its final change in May or June. Before the larva arrives at maturity, the straw very frequently becomes so hard, that the worm, when done feeding, is unable to cut through the joints and make its exit at the root in its usual way. Under these circumstances, its transformations are completed within the cavity of the culm, where the imago must eventually perish, unless liberated from its confinement by some fortuitous means. Thus it appears, as Miss Morris has remarked in her communications

to the American Philosophical Society, and to the Academy of Natural Sciences of Philadelphia, that this destructive insect may be transported from place to place, and even from one country to another, in wheat straw, as well as in the wheat itself. The Cecidomyia culmicola has been confounded with the true Hessian fly, which it resembles in appearance, and perhaps equals in its destructive ravages on the wheat crop. Under the impression that Miss Morris was describing the Cecidomyia destructor, her facts were called in question, and controversy ensued. The accuracy, however, of her observations have been triumphantly established; and it is now conceded that the insect described by her is one which had escaped the notice of other entomologists.

The larva of the joint-w rm dwells in the parenchyma or substance of the sheath, near its junction with the stalk; and can only be seen by cutting into the excrescence or blistered spot which constitutes its abode. Whether or not this insect prevails to any extent in Pennsylvania I am unable to inform you. But in some parts of Virginia the injury done to the wheat crop is sometimes very considerable.

The Angoumois moth and the Wolf are two insects of another order (Lepidoptera) that occasionally in their larva state attack the growing wheat; though their principal depredations are committed on the grain stored in garners.

Several insects, belonging to the Coleopterous Order, also do incalculable injury to stored up grain. The most destructive of these is that which has been pre-eminently termed "the weevil" (Calandra granaria,) one of the Rhynocophora. It is a minute insect, only one eighth of an inch long. The female deposites a single egg in each grain, the interior of which is entirely consumed by the larva.

It has often been observed, that when the insects, just noticed, as attacking the wheat crop, have increased to an alarming extent, a diminution in their numbers suddenly and unexpectedly takes place, causing the wheat fields on the ensuing year to be, in a great measure, exempt from their depredations.* Several causes combine to produce this happy and unanticipated result. To one of them—insect enemies—your attention will now be directed. These enemies are the Ichneumons—a tribe of insects, belonging to the Hymenopterous Order, and embracing many genera and species. They are all parasites; and by checking the increase of herbivorous or plant-feeding insects, prove the great insect benefactors of our race, although many of them are so minute as scarcely to be visible to the naked eye. Some of them puncture with their ovipositor, the eggs of the noxious wheat insects above alluded to, and place in them an egg of their own which soon hatches, and the little internal egg-parasite there lives, feeds and grows, till it has completed its larval and pupal stages, when it emerges a little winged ichneumon. Other species of ichneumon lay their egg within the larva and pupa of the Hessian fly and its allied wheat midges, where it hatches, feeds and passes through its several transformations. Although these internal parasites do not kill the larva while feeding on the adipose tissue contained in their bodies, yet they eventually either deprive them of the power of completing their final metamorphosis, or cause them to pass through it in such an enfeebled condition as to be incapable of perpetuating their kind. These impediments to the multiplication of the noxious wheat insects must necesarily prevent their increase in a ratio equal to that of their ichneumon foes. Consequently the latter will gain the ascendency, and then the sudden disappearance of the former is the natural and inevitable result.

On seeing these ichneumon parasites in great numbers in wheat fields infested with different species of Secidomia, many persons have very naturally attributed to them the destruction of their crop This conviction, they conceived, was corroborated by the fact that these ichneumons have been seen to emerge from the eggs and pupa of the Hessian Fly and its allied wheat midges. But the remarks already made will give you the true explanation of this adventitious occurrence.

Immense numbers of butterflies, moths, grasshoppers, borers, plant-lice, and a great variety of other insects injurious to vegetation, are, in this way destroyed by these parasites.

Besides the ichneumons, certain other insects of the Hymenopterous Order are also parastical.

Nor are the insect parasites confined to the Hymenoptera. Some of the two-winged flies (Dipter) possess the same habits; hatching and feeding the bodies within the various kinds of caterpillars until they are about to complete their final metamorphosis.

The Predaceous Insects constitute another class that are exceedingly beneficial to the agriculturist. Among these are many of the beetles, the sand-wasps; the dragon-flies, the Earwig (Forficula Auricularia) but more especially the Lion of the Aphides, (Chrysopa perla,) several varieties of the Lady Bird (Concinella,) and some of the Syrphian. The three last-mentioned predaceous insects while in the larva, and the Lady Bird even in its imago state, prey exclusively on the different species of plant-lice In conjunction with one or two minute varieties of ichneumon, they are the natural enemies of the Aphis; and where they abound, prove amply sufficient to secure vegetation against its exhausting ravages, notwithstanding the extraordinary rapidity with which it multiplies.

The Aphis or plant-louse is probably the most prolific of all insects. A single female, in the fifth generation, may have a progeny of five thousand millions; and sometimes thereare fifteen or twenty generations in a year. A most remarkable fact in relation to the propagation of the plant-louse, is the sufficiency of one copulation to cause the female descendants of every subsequent brood, for a twelve-month, to continue the re-production of the species. In the autumn, the sexes pair, and the female lays her eggs; after which the races for

*Since the above was written, I have received a copy of the Transactions of 1850 of the N.Y. State Agricultural Society, 108 pages of which are occupied with an able report of an Agricultural Survey of the county of Seneca, taken under the direction of the State Society, by John Delafield, Esq. From this report we make the following extract: "In the year 1840, the wheat crops of Junius, Tyre, Waterloo, Seneca Falls and Fayette, exhibited the effect of the wheat fly's presence, they destroyed nearly one-fifth of the crops of these towns. In 1850 the evil was abated, and but little loss experienced; this immunity was unexpected, and it is worthy of enquiry by entomologists, how far the climate, season and condition of the crops may have presented obstacles to the easy deposit of the egg, *or what other cause* so suddenly and effectually checked the increase of the wheat fly."

the time becomes extinct. In the spring the eggs are hatched, and the young are all females and wingless. They very soon arrive at maturity, and continue to re-produce their kind, not by laying eggs, but by bringing forth their offspring alive. Generation thus succeeds generation, without the agency or even existence of a solitary male until autumn; when a brood is hatched containing winged individuals of both sexes; and then the anomalous mode of perpetuating the species, just alluded to, terminates for the season.

The fecundity of many other insects is also truly wonderful. The Queen Bee lays forty or fifty thousand eggs in a year; the Ant between four and five thousand; the Silk-worm four or five hundred; the Wasp three thousand: and some species of Moth, in the third generation, increase to more than a million.

When we contemplate the immense number of species of insects, the countless individuals embraced in each, and their amazing powers of reproduction, we cannot wonder at their being every where so abundant, and at times so operative in controlling our destiny. The earth, the air, the water, teem with innumerable tribes. The food on which we subsist, the clothes we wear, our mansions, our furniture our books, all the productions of the vegetable kingdom, in fine every form of organic matter however diminutive or however colossal, are subject to their depredations. And though individually so small and insignificant, collectively they are capable of accomplishing results of vast moment for good and for evil. Such indeed is their wonderful voracity and procreative powers, that without the intervention of counteracting influences, vegetation would be utterly destroyed.

In the construction of the Universe, the Divine Architect, whose creative conceptions and consummate arrangements display the perfection of wisdom, formed it a harmonious whole, amply provided with well regulated checks and balances. So long as these adjusting powers were not disturbed by extraneous forces interposed by human agency, an inordinate increase of noxious insects was restrained, chiefly by the physical operation of the elements, and by the instinct and natural propensities of certain insectivorous animals Among the latter may be enumerated many of the *smaller quadrupeds.** reptiles,† insectivorous birds.‡ bats, our domestic poultry and the parasitic and predaceous insects to which we have already alluded.—The harmony of creation however, has been interrupted by the wanton destruction of birds and reptiles, and by the intervention of other causes. In consequence of this derangement in the economy of nature, the insect-vegetable-feeders have become more abundant, and necessarily more destructive.

To counteract the increase of noxious insects, it is necessary that artificial appliances should be called into requisition. But to employ them successfully, the insects that produce such widespread devastation should be known to us, not only in their perfect form, but in every stage of their being We should know on what food they subsist, whether they take it by suction or mastication—the duration of their larva, pupal and imago periods—and their habits. We should know the size, form, color, and usual number of their eggs—the season of the year when laid—their usual locality and arrangement, as well as the length of time required for Hatching. Finally, we should know their natural enemies, especially those belonging to the insect class.

*Mice, Moles Squirrels, the Hedge-hog, &c.

†Snakes, Lizards, Frogs and Toads.

‡Woodpecker, Martin, Swallow, Night-hawk, Whippoorwill, Crow, Blackbird, Robin, Wren, &c.

For the Wisconsin & Iowa Farmer.

Smut in Wheat.

MARK MILLER:

Dear Sir—An extract from the Genesee Farmer headed "A Cure for Smut in Wheat," induces me to endeavour to give to the readers of the Farmer a few words on the same subject. There is no doubt but that smut in wheat has been caused originally, during unfavorable weather by an imperfect tillage of the soil; but that it is a weakness or disease of the *seed*, which to many grains has caused immediate death, while to others it has left but a sickly life; imparting to their plants disease. Smut infected seed, gives smut on every soil, more or less according to the quality of the soil and its state of culture. But while sound healthy grain may retain its germinating and regenerating power through a long series of years the grains badly infected with smut will loose their germinating power within one year. Wherefore, I would take the liberty of recommending well-preserved, one year old seed wheat, whereby farmers might be saved the trouble of not only preparing the seed, but also that *of threshing for seed*, during a busy season, and consequently be abled to drag in their wheat earlier than otherwise. Then let the soil be well and deeply tilled, so as to afford sufficient moisture to the roots during a dry season, should it occur; and we shall not find much smut in our wheat, but raise a plant whose strength and soundness must enable it better to withstand the unfavourable influences of the weather, and also in a degree check the attack of rust.

A German, whose name I do not now remember, but who was considered one of the best practical farmers in Saxony, about fifteen years ago, in a description given of his method of farming in regard to wheat, expressed himself to the effect, *that old seed*, together with a carefully and deep tilled soil, operate exceedingly against the growth of smut.

According to the above theory I sowed early last autumn, twelve acres, with one year old smut infected wheat, which has thus far a very good appearance, and the final result of which I may communicate to your readers, should you think it worthy a place in the columns of your Farmer.

N. H. JARGENSEN, P. M.

Bothelle, Fond du Lac Co.. Feb. 2, 1852.

☞ A fat kitchen makes a lean will.

Berkshire Hog.

Best Breeds of Swine.

Col. Jaques, who some years ago superintended the Ten Hill farm, near Boston, and who experimented extensively in the various departments of agriculture, used to say that you might as well talk of a breed of jugs, as of a breed of hogs.—This, as interpreted by the Maine Farmer, is equivalent to the fact that unless great care is taken, it is extremely difficult to keep up the distinctive characteristics of any breed, long enough to fix them so permanently as in other kinds of stock. The following remarks and suggestions by the editor of that paper are as applicable to this region as to any other.

"Our farmers have generally been anxious to obtain good breeds of hogs, but they have not retained them long, and hence the frequent enquiry "where shall we find a good breed of hogs?" One reason why we do not retain these breeds longer is this: The breeders *are all slaughtered young*.—But few farmers keep a hog, male or female, over eighteen months or two years. At that age they are fattened and slaughtered—and some of the young *piglings* saved to propagate the breed.—These in their turn are slaughtered when a year and a half old, and some of their progeny saved to go the same rounds. In this way an extensive close breeding in and in, is followed. Is it any wonder that, in a few years, the farmer complains "my breed of pigs has run out!" Any breed of any animal would "*run out*" by this mode of management. The Bedfords, the Mackays, the Newbury Whites or Byfields, the Berkshires, the Tuscaroras and Hampshires, have all had their turns ameng us—all been treated in this manner, and all *run out*, tapered off, and "*vamosed*."

The Suffolk breed are now introduced on some farms. They somewhat resemble the Byfields, and may be a good sort if you have a warm sty, as they are not so well covered with hair or bristles as some breeds. But they are a doomed breed, if the usual course is to be adopted in regard to them. In a few years you will hear those who now have them, complaining that they have "*run out*."

THE BEST BREED OF SWINE FOR THE FARMER.—I am perfectly satisfied from long experience, and have publicly advocated it for upwards of ten years, that the best and most profitable swine for the farmer, is that breed which will nearly mature at eight or twelve months old, and then weigh well fatted and dressed from 250 to 350 pounds.—A pig that has to be wintered and kept till sixteen months old before fully fatted, rarely pays for itself at the ordinary price of pork; and the average weight of these, in the United States, even at a year and a half old, I do not believe exceeds 350 pounds.

Now, what the farmers want is a large breed with fine points and great growth. Such a breed can be made fat at any age, and invariably matures quick. But recollect they must have *fine points*; by this I mean fine or small heads, ears, legs, feet and tail, a wide deep chest, and a round full body, like a barrel. These constitute what are technically called fine points. None of your big heads, large lop ears, coarse bristles and hair, long legs, great feet, and flabby, thin, slab-sided bodies, after the alligator or landpike order. Of the large breeds, I prefer the Lincoln.

In order to get pigs to weigh well, they must come early. February in the southern, March in the middle, and in April in the most northern states, are the best months to drop pigs. Feed them from the start, all they will eat, and they will be ready to kill from October to January; and thus you dispense with wintering any, except those reserved for breeding.

For hams, particularly, and sometimes for bacon, especially for the English market, lean tender meat is most desirable. A particular breed, like the Berkshire, is best adapted for this purpose; and these may be kept from a year to eighteen months old before fully fattened. When it is desired to fine and improve swine of coarse points, it is best to use the Suffolk for a cross upon them; but these of themselves are too small, and not of sufficient growth to suit the general purposes of the farmer. They do very well for those who wish fine delicate pork for their own family use.

A. B. ALLEN.

A GOOD PLOW.—At the Hampshire County Fair, held at Northampton, a feat never before performed in plowing, was accomplished with one of Ruggles, Nourse & Masons stubble plows. "The contestant started his horses at one side of the field, he set the plow, and then let it run by itself to the end of the lot, a distance of 35 rods. Then it was just touched sufficient to guide it round to the next furrow, when it *set itself* and went through without a hand being touched to it. This is a quality which has long been desired, and it is manifest that the plow can do its work well, without being held, has little need of any other recommendation.

A man's owning a large farm is no excuse for imperfect tillage. What he cannot improve, he need not undertake to cultivate.

HORTICULTURE.

Circular,

TO THE FRIENDS OF HORTICULTURE IN THE NORTHWEST.

The undersigned as Corresponding Secretary of the Northwestern Fruit Growers' Association, and in its behalf, would most respectfully, but earnestly request all interested to take full notes of the different varieties of fruit which may ripen with them before the meeting of the association. Concerning the strawberry—also, to keep minutes of their experiments on different soils with different stocks, *dwarf or free*—modes of propagating, root or stock grafting—of cultivation by mulching or stirring—for the prevention or cure of the blight, and other diseases—for the destruction of insect depredators, as the rose-bug, curculio, &c. —what varieties prove most hardy and what most tender; and forward such reports to him at Dixon, Ill., *in time to be laid before the next meeting, on the last Wednesday in Sept., next.*

Friends, let us take hold of this work in earnest. if we would do ourselves, our opportunities and our cause justice. The past summer and winter were, in many respects, trial seasons. The coming fruit season promises many new and valuable lessons. Let each, then, heed and by mutual contribution swell the common stock to a most noble "PILE" of horticultural knowledge.

F. K. PHŒNIX.

Delavan Nursery, March, '52.

Brief Horticultural Notes—No. 5.

BY JOHN A. KENNICOTT, M. D.

The sweet spring time—the busy spring time—the conception of faith, and the birth of hope in horticulture—is, or should be, here. But, good sooth, "stern winter brings in the lap of spring," and we have a foot or more of well packed snow, above the white snow drops, and glittering patches of many colored crocuses, which gemmed the lawn but yesterday—and how can one write of cultivating trees, at such a time? Let us see, however.

But first, an accident, to show that such a snow may act as a "burning glass," through reflection of the sun.

There was not a cloud yesterday; and my sons undertook to graft some cherries, at standard height; and before they were aware of it, their faces were so miserably burned that they look like patients with confluent small-pox, and can scarce see, from inflamation of the eyes. I observe, too, that the reflected heat caused the immediate *flowing* of the trembling poplar (*populus tremuloids.*)—But enough of this—there is nothing new in it—but it shows you where the heat goes, that strikes a white surface, incapable of radiation.

Now, my good friends, if you have planted an orchard, in accordance with the rules I sent off last month, you have done well. But if you destroy it by mismanagement, or permit it, through neglect, to go the way of "three fourths of all the trees planted," it were better, had you never planted at all, for your example will discourage others.

But I think you intend to do better than the people "down east," who lose three-fourths of their plantings, as we are assured by their own writers.

The first great mistake, made by too many, in this region, is *deep planting*; the second, *sowing small grain* in the orchard; the third, *seeding down to grass*; fourth, lack of *cultivation* and general *care.*

Never plant a tree deeper than it stood in the nursery, except in especial cases, which may, hereafter, be named. On wet soils, if not thoroughly underdrained, many plant on ridges, raised by the plow. Remember, that you should plant fruit trees pretty much as you would corn; and with the lateral roots as near the surface as well may be; for plenty of the lower ones *will* go to a depth sufficient for all the purposes of healthy growth, and those which you incautiously place below the genial influence of air and heat, and surface moisture, and perhaps light, and other principles, will certainly contract disease, and eventually effect the whole tree.

"Leaf blight" may almost always be traced to deep planting, in wet soil, and often, perhaps, that most discouraging disease, called "fire blight" or BLIGHT, par excellence—and there is no sort of question, that other common affections are chargable to this common practice of forcing a tree below the point indicated by nature, or in soils of too great moisture.

It has been said that "two successive crops of rye will ruin the best orchard," and I am positively convinced, from observation, that three crops of wheat or oats will prove full as ruinous to the hopes of the orchardist.

Barley and buckwheat have not appeared so bad, in young orchards—but they are bad enough, and the latter exhausts the elements needed for the fruit crop, more than most other grains. So avoid *all* small grains, if you expect to raise trees; for, depend upon it, *one* crop will be enough to put your orchard back, *three years.*

Seeding down, unless you cultivate a circle around each tree, is nearly as bad a practice as sowing small grains. I asked the question at our North American Pomological Congress, if a man *would* seed down his orchard, what should he put on? The answer was (by one who knows,) "Hogs,

Doctor, hogs—seed down with hogs—nothing *but* hogs."

Cultivation among trees, when large, or the cultivation of them, while small, should be the same that you give your best worked "hoed crops" —corn is one of the best things for planting among trees, on a large scale—though nearly all garden vegetables, potatoes, vines, roots, peas, beans, &c., will do, on occasion. But as soon as the fruit begins to pay, you should take no other crop from the land. Plowing it, therefore, every spring, to a good depth, even though, a root should, now and then, be cut; and then cultivating with a single horse and light harrow or cultivator. The horticultural plow of Professor Wilkinson, (of Mount Airy, Penn.,) may save the trees from an occasional wound, but we prefer, in the absence of such a plow—not to drive near the trees, as it does not take long to work out the balks by hand, as you must, of necessity, dig over the ground, near the tree, in that manner.

One word about managing trees girdled by mice and I have done for to-day. Scions of proper size may be nicely fitted, at top and bottom, to the sound bark, or if too late to cut scions, we have, (as soon as the bark would peel,) taken off strips from large branches, and fitted them in place—first cleaning the surface to be covered—and then, as in the first case, binding all close with stout ligatures of bass, or shreds of cloth, or woolen twine, and covering the work with plenty of grafting clay, and then drawing up a broad mound of good rich and mellow soil. The first process is best, however, if neatly executed. If your tree is a large one, and completely girdled, you should shorten in the top, very severely. When but slightly injured, mounding up, so as to cover the wound, will save it.

Northfield, Ill., April 7th.

Cranberry Culture.

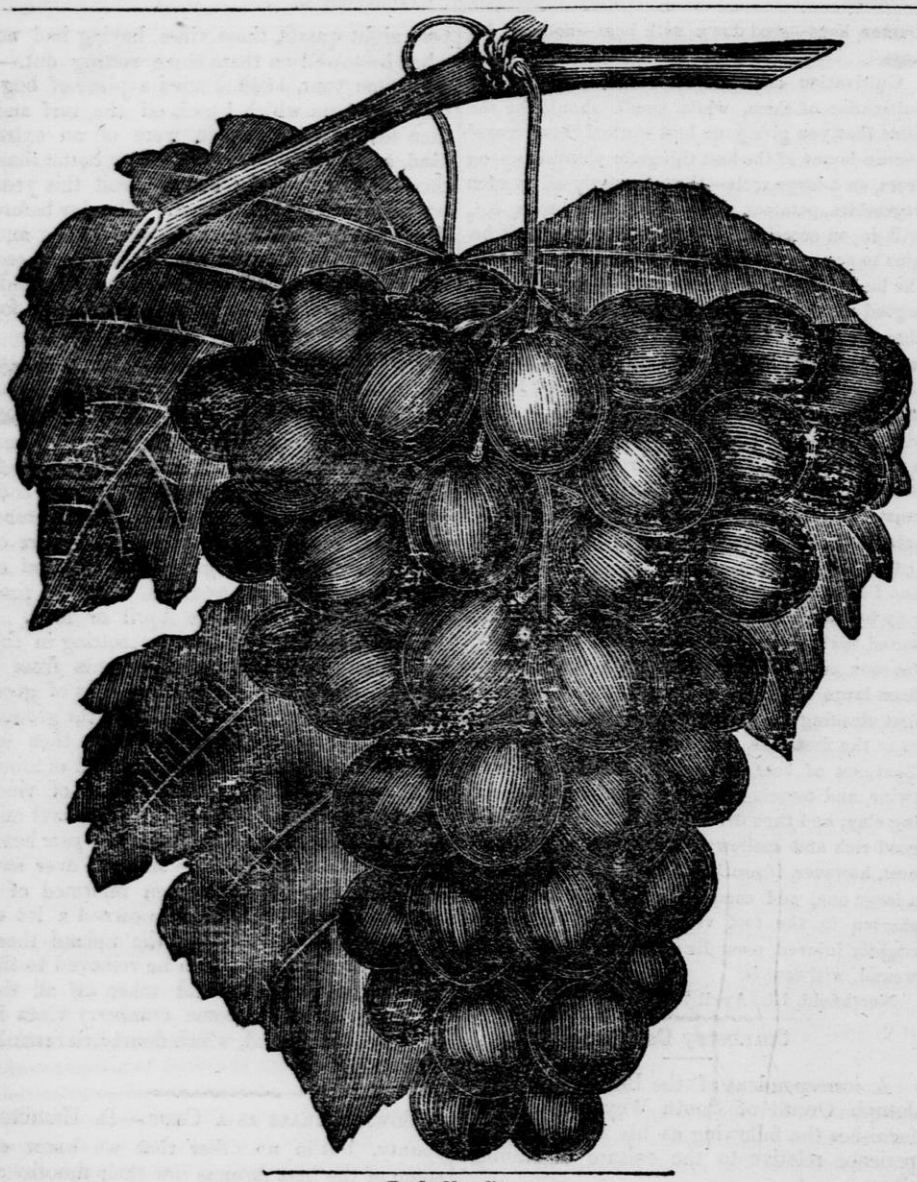
A correspondent of the Boston Cultivator, Joseph Orcutt of South Weymouth, Mass., furnishes the following as his views and experience relative to the culture of cranberries :

"I own about an acre of meadow, covered with cranberry vines ; last year I gathered twenty bushels, this year none, owing to a frost in June which destroyed the blossoms. In the year 1849, I set out forty bunches of vines on a high bluff of ground, elevated about forty feet from a piece of interval near by, and on which I have apple and quince trees growing luxuriantly. The soil in which I set the vines was very thin and poor. the amount of ground occupied by the vines being about one rod. The first year these vines produced one quart, the second year four quarts, third year eight quarts, these vines having had no labor bestowed on them since setting out.—The same year, 1849, I tried a piece of bog-meadow, from which I took off the turf and then set the vines, which were of an extra kind, and they have not done any better than those on the upland ; but the fruit this year has been destroyed by frost. The day before the frost occurred, I took up some vines and set them on the upland where they produced a few cranberries. I prefer upland to meadow for the cultivation of the cranberry, for the following reasons:

On upland they grow larger and ripen earlier, the quality is better and keeps better.—The freedom from frosts and from being flooded with water insuring a regular crop, and they can be cultivated in any situation which is desirable, being gathered with greater convenience. On meadow, in very wet seasons, the expense of gathering is near the value of the crop. They will grow on any kind of land, as well on poor as rich. The best time for setting the vines is in April or May. I have half an acre prepared for setting in the spring, and have selected the plants from a bog-meadow which bears cranberries of good size and quality ; I shall strike out the ground in furrows four feet apart each way, then set the vines without manure. A friend of mine, in the year 1849, set a few bunches of vines in a light soil, with a subsoil of gravel and sand, and they have done well, this year bearing cranberries of as large size as I ever saw and very full. I have been informed of a gentleman residing near, who owned a lot of meadow and upland ; on the upland there was a gravelly knoll which he removed to the meadow, and when he had taken off all the elevation, he set out some cranberry vines in the gravel and sand, which flourished remarkably well."

Sowing Grass as a Crop.—In Hamilton county, but in no other that we know of, some of the best farmers sow their timothy as they would a crop of grain. They prepare the ground thoroughly, by plowing, harrowing and rolling, till it is well tilled and smooth. The seed is then sown early in September and brushed in. They put on about a peck to the acre. The results are very striking. They have a crop of hay the next haying—it is the kind they sow, and no mixture of native grass —it is free of weeds, and the meadow will endure about twice as long before it must be broken up. Thus the increased labor and expense is returned many times over.

[Western Agriculturist.



Isabella Grape.

This very popular grape, a native of South Carolina, was brought to the north in 1818 by Mrs. Isabella Gibbs, in honor of whom it was named. Its great vigor, hardiness, and productiveness, with the least possible care, in high latitudes, have caused it to be widely disseminated. No garden should be without it. Its flavor is slightly musky, but pleases all palates, and is eagerly sought when in season. It can also be as easily preserved as the apple for winter use, retaining its flavor and freshness in a good degree through the winter and spring if properly managed. Its berries are of a large size round or slightly oval, skin thick, dark purple, branches medium size, rather loose on the stem.

In the spring of 1846 we procured an Isabella vine of a neighbor, who considered it to be worthless; it never having borne any fruit, although it had been planted several years.—

It grew on the south side of a tight board fence and had been partially trained against the fence. After burying a long arm horizontally on each side of the root, we had the remaining branches closely pruned, leaving only three to train up, and those were cut off to within about 4 feet of the ground. We erected an arbor 14 feet long, 10 feet high and 8 feet wide, and on the south side of it, fastened up the branches with narrow strips of woolen cloth and common tacks. As new shoots came out, they were nailed up as nearly horizontally as possible with cloth and tacks.—The soil was treated with a few shovels full of stable manure at the time of pruning, and after that, the soap suds and dish-water slop from the kitchen, were thrown around the roots through the summer and autumn—averaging three pails-ful daily. The result was a very strong vigorous growth, the vines thickly covering one side, the top and nearly one-half the opposite side of the arbor that year. It produced three bunches of fruit the first year, but the next year we gathered about a bushel of fine large clusters and the growth of vine was vigorous. The third season it produced more than two bushels of luscious fruit. We continued the application of kitchen slops and soap suds from the week's wash during each season, but no other manure after the first dressing from the stable.

Having seen many barren vines and heard much complaint of the difficulty of raising grapes we commenced our experiment with little faith in its success ; but the result convinced us, that with proper treatment the grape may be more easily cultivated and a fair crop as surely calculated upon, as any other fruit or garden vegetable whatever. Indeed, a few hours' labor each season, in pruning and fastening up the vines is all the labor that is necessary after the vine is well planted, unless the earth is inclined to bake down. In that case a three-pronged fork should be used for stirring the surface about the roots to the depth of two inches, and if grass and weeds appear they should be pulled immediately, so that the roots may have full benefit of solar light and heat.

The present season is so backward that it may yet be safe to plant out roots and cuttings to some extent, though we would not risk many. When but few vines are cultivated it is true economy to dig a trench two feet wide and two feet deep, running north and south ; sloping to the south if possible and fill in first small stones, brick bats, pieces of old mortar, old shoes or leather cuttings, broken earthen, and especially whole bones of various sizes, woolen rags, &c., to the depth of 1 foot. Then cover with fine rich loose earth, with which is mixed a quantity of stable manure. Having thus prepared your soil, set out roots, or plant cuttings and keep the ground moist with soap-suds, or some liquid manure that will act directly upon the roots. If cuttings are set out, about a pint of soap-suds or other enriching liquid should be applied daily in dry weather, until the roots have started, else the plant may fail to grow for want of proper nourishment. After the vines are well started, caution should be used in applying manures, as there is danger of producing so rank a growth of leaves and wood as to injure the fruitfulness of the vine, besides deteriorating the quality of the fruit.

For the Wisconsin & Iowa Farmer.

Mr Editor—This is a busy season with us nurserymen, for which reason I am unable to communicate much on a subject which is of primary interest with me—and I am happy in being able to add, is exciting increased interest among the farming community in this region. I refer to the planting and management of orchards in the North West !

Nowhere do apple trees bear with more regularity and certainty, than in all the southern portion of Wisconsin up to the 44th parallel of latitude, as the past few years' experience with those who have trees large enough, has abundantly demonstrated. The writer is acquainted with trees which have now borne their fifth annual crop of apples, (one of which is on his own grounds) all of which were full crops, except the last, which was about a half crop.

It is worthy of remark, that while in northern Illinois and Wisconsin the apple crop of the last season was quite respectable, in central Illinois, Indiana and Ohio almost an entire failure was realized.

From quite extensive observations in the west since the first settlement of Wisconsin, the writer is well convinced that while apple trees will grow more rapidly and produce in a greater number of instances large and highly colored specimens of

fruit below 41½° degrees of latitude—that north of that line the young crops will be much less liable to suffer from spring frosts, and that winter and long keeping varieties, will keep better in the more northern portions of the great west.

Doubtless before this reaches the eyes of your readers spring planting will be over—which fact would render anything I might wish to say of the selection of varieties and transplanting into orchards out of order at this time. Presuming then that the selections have been made and the trees planted in places where the subsoil has been broken or removed to the depth of 20 inches and the work finished by a loose top dressing of rich soil, I will proceed to give some suggestions which may be of service to those who are not acquainted with the best modes of operating with the young trees, to bring them into a profitable bearing state in the shortest possible time with the least possible loss of trees.

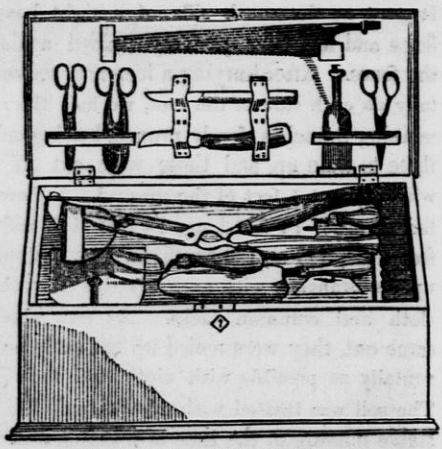
In the first place do not think of sowing oats, wheat, grass or any other close growing crop among the trees. Corn, potatoes, vines, or some other hoed crop should be planted giving each tree a space of 8 feet square by itself. About the first of June or so soon as the ground is somewhat warm, cool the space left for the tree with straw or other litter to the depth of three inches and keep it there replenishing as occasion may require during the first half of summer.

If the newly set trees do not start in time sprinkle water twice each day upon the tops; don't pour any upon the ground. the roots are wet enough. If you can induce the leaves to put out, the roots will grow afterwards, not before. Small quantities of leached ashes or lime, or even old bones thrown upon or scattered among the straw or mulching will do the trees no harm, and will help to keep the straw in its place. Trees are fond of bones and will thrive upon those which a dog would reject. The trunks should receive a scrubbing in May with strong soap suds, which will destroy the eggs of insects, and render the bark soft and yielding to the presence of the newly forming wood, which prevents *bark blight.*

As the careful cultivator would hesitate to spade deep around his newly set tree and sever its newly formed roots; so he should see that none of the numerous insect *leaf eaters* are allowed to feed upon its foliage—for this purpose visit each tree each morning, or twice a week at least, jarring off with the hand and dispatching all such intruders. Watch for the aphis (queen lice) as soon as any of them are visible crush all between the thumb and fingers, although some of the foliage should suffer with them they must be kept down if possible on young trees; they are not apt to trouble well-grown trees, after they have stood in the orchard three or four years. But enough has been said for the time being. If my time permits, I may, with your consent, give your readers some further off-hand suggestions upon the culture of the apple and other fruits in Wisconsin.

J. C. Brayton.

Aztalan, April 14, 1852.



Horticultural Tool Chest.

This is a small, portable chest, containing a useful collection of tools, such as are generally used in managing trees, shrubs and plants of any description. These articles are very convenient, and always at hand, when kept in a compact form, and neatly arranged in a chest, which is so light that it can be easily carried in the hand from one part of the garden to another, by the handle at the top. Such arrangement greatly facilitates labor, and aids in executing various operations in the neatest as well as the most expeditious manner. This chest contains a pruning saw, pruning chisel, weeding hoe, garden rake, tree scraper, scuffle hoe, and hook, all of which are fitted to one handle, which may be screwed together or unscrewed, as required, packed into the chest, and locked up. It also contains twig cutter, vine scissors, flower gatherers, grafting hammer, strawberry fork, transplanting trowel, weeding trowel, garden rule and line, grass shears, sliding pruning shears, pruning knife, and budding knives. [N. E. Farmer.

Orchards, Apples and Fruit.

"David, I am going to quit the nursery business. In twenty-one years fruit will be a drug in New York city. Why, every body is setting out orchards. Just look around this neighborhood; there is Deacon Jones has just set out 500 trees, Tom Smith, 400 and his brother Jim will have 1000 next spring, and so on at that rate all over the country—grafted fruit, too, none of it for cider Now what do you suppose is to become of all these apples? I tell you what it is, David, we must wind up the nursery business or we shall break flat. Everybody is going crazy about fruit. Everybody will grow it, but nobody buy it, a few years hence."

This prognostication was made more than twenty years ago, by a sensible man engaged in propagating choice fruits, for sale, in central New York: and no doubt the speaker honestly believed the days of the nurserymen were well nigh numbered.

Brother David, however, was of a different opinion. He did not believe it so easy to overstock the market with such fruit as no other than American soil and climate can produce. He did not believe ere twenty years' time would elapse, everybody would have an orchard, the products of which would be so unsalable, and the business so unprofitable, the owner could have no desire to plant more or better, or newer varieties of trees; consequently he urged that the business should be perseveringly continued, until the dawning of the evil day was more visible in the horizon.

What has been the result? A sale of 40,000 apple trees, and 7,000 of other fruits, during the planting season of the last year, and the prospect for the next equally good. The very men who had planted 500 have increased to 1,000, and some of them have doubled that ten fold; and yet, the market is now better than it ever was before, for all the choice varieties of the product of orchard, vineyard, or garden. The market is not yet very glutted, nor can it be while millions of mouths continually water for the luscious fruits which contrast so advantageously with the sour crabs, "five to a pint," which filled our market twenty or thirty years ago. The market cannot be glutted with such fruit as Newton pippins, Roxbury russets, Rhode Island greenings, Baldwins, Belleflower, Swaar, Dominie, and a great variety of other excellent winter keeping apples; while the luxu y-loving mouths of old England are within two weeks, (we have done counting by miles,) of the fruit bearing hills of New England. Nay, not only New England and New York, but the ever bearing trees of the rich plains of that once far away western wild, known in our boyhood as New Connecticut. But still, the market is not glutted, nor will it be, though all Ohio, Michigan, Indiana, Illinois, and Wisconsin shall pour in their golden treasures of golden pippins from their unbounded plains of the richest fruit-bearing land the world ever saw, while that same world full of people possess the taste they now do for choice delicious fruits.

The demand in Europe is increasing, and will continue to do so with every shipment, and the increased consumption in this country is in exact ratio with the improvement of quality; especially, since it has become a well settled fact that the use of fruit promotes the health of all who are its greatest consumers.

The business of buying and selling apples in the New York market, has now become a great branch of the mercantile pursuits of this great city. Men of large capital are engaged in the business with extensive ramifications through the country, so that a farmer within reach of the city by water or railroad, who has an orchard of a thousand choice trees, is as well known to the fruit merchant here, as in his own immediate neighborhood: and his crops of apples are often engaged before half grown. So far as our observation extends, the culture of fruit is the most profitable of any branch of American agriculture, upon the capital and labor invested.

Our advice therefore, is as it always has been, to every man who owns an acre of ground—*plant trees* Don't be afraid of overstocking the market with any kind of fruit, except such as your fathers used to grow, and some of you still perpetuate; because the refined and improved tastes of the world demand, and will have, if it is procurable, the best that can be grown. [Oswego Jour.

Lice on Apple Trees.

A friend from Pittston has sent to our office a branch of an apple tree all encrusted over with little greenish scales that look like minute muscle shells.

They are not uncommon to young apple trees, but are a serious trouble, and very injurious to their growth. They are formed by a little fly, which lays an egg or two on the branch and then covers them over by this scale which protects them from the weather Here they lie until hatched by the warmth of spring, when the worm perforates them and creeps out. If examined by a glass of moderately magnifying power, they can be clearly seen.

A good method to prevent and destroy these, is to make a lather of whale oil soap, or if that cannot be obtained, common soft soap of the kitchen will do. Take it in the hand and rub it on. It is said a wash of quassia wood steeped in water, will destroy them. A lye made of a pound of potash two gallons of water, and applied with a swab, is sometimes used—or a lye made of common wood ashes not very strong, may be applied in the spring before the leaves start. [Maine Farmer.

The Orchard Caterpillcr.

BY LEVI BARTLETT, ESQ.

In the Farmer of the 14th instant, I notice an article on the orchard caterpillar, by H. of Bedford. His history of the spring caterpillars which feed upon the apple and cherry tree—or rather upon the leaves of those trees—is quite correct. They are a very different insect from the summer, or web caterpillars, that have become so abundant within a few years past. The elm, ash, cherry, and many other kinds of trees, besides the apple, were disfigured by their large webs the past season. The eggs from which the spring or early caterpillars are hatched, are deposited by a miller or moth "transformed from the caterpiller." The eggs are placed around the limbs and twigs, forming a kind of ring or bracelet; this ring consists of three or four hundred eggs, in the form of short cylinders, standing on their ends, close together, and covered with a thick coat of brown varnish. They remain in a dormant state from the time they are deposited by the winged moth in July or August, till about the time of the unfolding of the apple and cherry leaf in the latter part of April or beginning of May. They continue in the caterpillar state about seven weeks. Their habits, ravages, and the unsightly appearance of their nests, are so generally understood, that nothing further need be said upon these points. Many of the eggs can be removed from the lower limbs of the trees by searching for them in the winter or early spring. Those that escape and hatch out should be destroyed soon as the nests are seen. For this purpose a spiral brush is the most effective instrument I have ever used for ridding my trees of these "useless intruders." A mullen head tied to a pole answers as a substitute for the brush; its rough surface readily winds the silky nests with its occupants, and they are easily crushed.

Going over an orchard two or three times in this way with the brush, will rid it of the spring caterpillar. The summer or web caterpillars, are hatched from eggs layed by the parent moth, (a winged insect,) in a cluster upon a leaf near the

extremity of a limb. They are hatched from the last of June till the middle of August, some broods being earlier, and others later. The young caterpillars immediately begin to provide a shelter for themselves by covering the upper side of the leaf with a web, which is the result of the united labors of the whole brood. As they increase in size, they enlarge the web. Thus they go on increasing the size of the web, and devouring only the upper skin and pulpy portion of the leaf, leaving the veins and lower skin of the leaf untouched.—Toward the end of August and during the month of September, they leave the trees and disperse, wandering about till they find suitable places for shelter and concealment. Here they wind their cocoons and remain through the winter. In the months of June and July they are transformed into moths. These moths are white and without spots; their fore thighs are tawny yellow, their feet blackish. Their wings expand about one and a quarter inch. The only time we can attempt to exterminate these destructive insects with any prospect of success, is when they are young and first beginning to form their webs on the trees. So soon, then, as the webs appear on the extremities of the branches, they should be cut or stripped off and be crushed under foot. The cabbage butterfly, the black squash bug, and many other insects deposit their eggs upon the under side of the leaf, similar to the parent of the caterpillar above described. [Granite Farmer.

PARSNIPS FOR SWINE.—In the Isle of Guernsey, the raising of parsnips for swine is a leading branch of farming. The root is almost exclusively used for pork making. A gentleman who once resided there, noticing the peculiarly fine flavor of the pork, inquired the reason of it and was informed that it was owing to the hogs being fattened on raw parsnips. The pork, he says, was beautifully white, sweet, juicy and firm.

A correspondent of the New England Farmer says:

One writer recommends to keep the potato plant from the warm south wind. I think he is correct in his views on the subject, and while I would protect them from the warm south wind, I would have them freely exposed to the cool breezes of the north. In 1850 I had a potato patch so situated that a small grove almost entirely prevented the north and northeast wind from reaching it. On my neighbor's land, on the same kind of soil, but a little higher up, the potatoes did not rot at all. We find it necessary in Vermont to have our wheat sowed on high land, where it will be much exposed to the wind, in order to secure a good crop, and in cool dry seasons the potato rot has not prevailed to any great extent.

HORSE-RADISH.—This, like most other plants, delights in a deep rich loam, and moderately moist, provided the moisture be furnished regularly and by a constant supply of water. This root will not grow in poor soil, nor beneath the drip of trees. It is a native of Europe, and is used for medicine, salads and sauces.—The root is rasped or scraped, and used either plain or soaked in vinegar. Its medicinal effect is said to be to stimulate the glands to activity. The root, when freshly grated, assists digestion, and is therefore in high repute as a table condiment as it is supposed by some to prevent scurvy.

In a commercial point of view it is fast rising into importance: hundreds of acres are now cultivated for exportation. The root is suffered to grow for two or three years, and is then lifted and sold to pickle makers by weight, who grind and pack it in bottles for exportation, and in this form large amounts are sold for ship's use, and for the West Indies, South America and other markets.

[Working Farmer.

CARROTS FOR FATTENING.—Professor Mapes says: As to comparative value for fattening cattle, the carrot is to be preferred to all other roots, for, in addition to its high nutritive properties, it contains large portions of pectic acid, which has the power of gelatinizing the fluids in the stomach, thus rendering the contents more readily available and more easily digestible; this crop is easily kept during the winter, and is preferred by cattle to all other roots. Of the sort known as Belgian Carrots, nine hundred bushels may be easily raised per acre, and they will be found to take the place of oats in part for the use of the horse.

A GOOD EXAMPLE FOR MILWAUKEE.—A beautiful idea is that of an Ornamental Tree Association. The East Boston people have lately formed one, the object being to encourage the planting and cultivation of trees in the public streets. Each member pays one dollar a year.

VALUE OF THE ARTICHOKE AS AN AGRICULTURAL PRODUCT.—Recent investigations of this common root show that 100 parts by weight of the tubers contain 23.96 of alimentary substance, being richer in nitrogenous, fatty, and saccharine matters, and in phosphates than potatoes. It therefore follows that the artichoke would prove most valuable for the fattening of pigs, cows, and animals generally, and its cultivation for this purpose is well worth the attention of farmers. As the tubers do not contain amylaceous substances, and are very easily soluble and digestible, it would be best to mix them with other aliments more resistant and less humid, such, for example, as dry fodder, bran, and grains, which would be ameliorated by the mixture. As to the difficulty of limiting their spontaneous reproduction, that may be prevented by the cultivation within boundaries, especially of plants which are cut down in the green, making weeded or hoed plants succeed them. The stems of the young artichokes also constitute a good green fodder.

[Proceedings of the French Ag. Society.

EDUCATIONAL.

CONDUCTED BY J. L. ENOS.

Writing.

The celebrated Dr. Dick, in his admirable work, The "Moral Improvement of Mankind," has some very sensible remarks on writing, which we copy for the benefit of "fancy writing masters and their admirers and supporters."

"In regard to the art of writing, which is chiefly a mechanical exercise, the quality of which depends somewhat on the taste of the pupil, a great degree of fastidiousness exists, and by far too much importance is attached to the acquisition of an 'elegant hand' To so disgusting a degree has this predilection been carried, on certain occasions, that all the qualities of a good teacher have been concentrated in this one acquirement; and persons have been selected to superintend the instruction of youth, who were destitute of almost every other qualification, merely because they could write a 'fine text," or an 'elegant running hand.'

The art of communicating our thoughts by writing is one of the most useful accomplishments, which every person from the highest to lowest ranks of society ought to possess. To attain a certain degree of neatness and regularity in writing, is highly desirable; and where a taste for elegance in this art exists, it should be encouraged, though not at the expense of more substantial acquirements. To write *straight*, to attend to the proper use of capital letters, and to arrange the subject of writing into distinct sentences and paragraphs, so as to render the writing easily legible, and the sentiments perspicuous to others, should be considered as the great object of this art; and such qualities of writing are undoubtedly of more importance, in the practical purposes to which it may be applied, than the acquirement of the most elegant 'dashes' and 'flourishes' of penmanship.—I have, indeed, known but few individuals who have prided themselves on such showy accomplishments, who were not extremely superficial in the other attainments. It is a very odd circumstance, and shows to what a ridiculous length a fastidious taste for elegant writing may be carried—that most of the higher ranks, who have been taught by the first writing masters, now consider it as *fashionable* to write an illegible scrawl, which is nothing else than a *caricature* of good plain writing—which is the pest of printers, editors, and every other class of correspondents—which costs them a world of trouble before it can be read; and, in many cases, the very names of the writers can scarcely be deciphered.

This is *elegance* with a witness; it is carrying it to its highest pitch of perfection, by rendering the art of writing almost useless for the purpose for which it was intended. I do not mean, by these remarks, to insinuate that care and attention should not be bestowed, in order to acquire a neat and accurate mode of writing; but merely to modify that undue degree of importance which is attached to the accomplishment of 'fine writing,' and to impress upon the mind this sentiment, that a man may be possessed of very slender attainments in this art, in respect to elegance, and yet prove a good general teacher; while another may excel in all the ornamental flourishes of penmanship, and, at the same time, be altogether unqualified for directing the young mind in knowledge and virtue.

I have known parents and guardians who seemed to consider the most useful and substantial accomplishments of youth as of little value, while their children remained in the smallest degree deficient in the flimsy ornaments of writing, and the higher elegancies of penmanship. In a word, to arrest and record the useful ideas which pass thro' our minds, to communicate them to others, in such well defined characters, and with such external neatness and order as may be most perspicuous and easily legible—to acquire a certain degree of facility and rapidity in forming characters and words—and to state mercantile accounts with taste, accuracy and precision—should be the great objects of the art of writing, beyond which it is of little importance to aspire; though, at the same time, no individual should be discouraged from indulging a taste for elegance in this department, when it does not absorb the attention from more important pursuits.

TEACHERS wishing locations in good schools will do well to apply to the editor of this department as he is at this season of the year applied to almost every day for *good* teachers. All letters should be post paid and a *stump* enclosed to pay the answer. No charge will be made—and none need apply who are not thoroughly qualified for the profession of teaching.

FREE SCHOOLS IN TORONTO.—The board of Trustees of common schools in the city of Toronto, have attempted by a rule or regulation to make the schools in that city free to all, and have the schools supported by a general tax upon the property of those residing within the city limits. In consequence of this new arrangement, an indignation meeting was called by some of the wealthy citizens to express their disaprobation of the course pursued by the school authorities.

Speeches were made both for and against the measure. But on this, as on former occasions, those in favor of free schools came off triumphant. The following amendment to a resolution was adopted almost unanimously.

"That as sound and thorough elementary education is the birth-right of every citizen, and enlightened patriotism demands that it ought to be in the largest sense of the term 'universal,' therefore this meeting approves of the system of free public schools; subject to such wholesome regulations as the Trustees may see meet to adopt."

Proceedings of the Teachers' Normal Institute for Eastern Wisconsin.

The third session of this institute opened in the village of Genesee, in Waukesha Co., on Monday, March 22d, 1852, under the superintendence of JAMES L. ENOS, graduate of of the New York State Normal School, as principal.

The institute was organized by the election of the following committee:

Finance Committee — Ebenezer Sprague, Wm. Hardy, Peter McVane.

On Resolutions.—George A. Selleck, Chas. D. Parker, Carroll Lucas, Misses Clarissa H. Selleck, Martha C. Loomis, Augusta S. Bowe.

The introductory lecture was delivered on Monday evening, by Rev. C. W. Camp, of Genesee, on the importance of Teachers' Institutes to our Free School system, which was listened to by a large and respectable audience, assembled on the occasion.

The exercises of each day, during the session, consisted of a thorough drill in the different branches, required to be taught in our Free Schools, and an exposition of the different and most expedient methods of teaching the same.

The evenings were devoted to the discussion of topics connected with our free schools, and to general lectures.

During the session the following preamble and resolutions were unanimously adopted, viz:

Whereas, The president of the institute has, by his course of conduct, rendered himself incompetent for the discharge of the duties of said office, which he was elected to fill, and has also failed to be present at this session of this institute, thereby giving us reason to believe that he does not intend to act as president during the remainder of his term of office, therefore,

Resolved, That the Vice President be directed to act as President of this association, for the remainder of the current year, and that we proceed to the election of a Vice President *pro tem.*

Whereupon Edward Manning was duly elected Vice President *pro tem.*

At the last session of the institute the committee on resolutions reported the following, which were adopted:

Resolved, That upon the right education of the youth of our land, depends the future welfare and prosperity of our country and the perpetuity of our free, political, civil and religious institutions.

Resolved, That the free school system is the foundation upon which is to be created the great superstructure of civil and religious liberty, and the instrument in the hands of government of elevating the mass of our country to that position in society, which they are justly entitled by nature to occupy.

Resolved, That we consider Teachers' Institutes essential to the advancement of our free schools, inasmuch as they impress the mind of the teachers with the great responsibility of their station, and inspire them with a love of, and enthusiasm in, the great work of training the youthful mind; and that we will use our best efforts to sustain them as an effectual means of securing an interchange of opinion among teachers—an object of great importance in this calling, and also as the most effectual means of acquiring the best methods of government and instruction.

Resolved, That we believe the frequent change of teachers is a fruitful cause of the inefficiency of our public schools, and recommend the continual employment of the same teacher through the year, so far as the same may be practicable.

Resolved, That we approve of the movement establishing a "State Juvenile Temperance Association" in this state, and recommend to the teachers of this section of the state, to co-operate with the Central Association, as soon as formed, in carrying forward the proposed work.

Resolved, That as teachers and friends of education, we believe the cause of education in our state may be greatly advanced by the holding of a "State Teacher's Convention," at the earliest period practicable; said convention to be held either at Madison or Watertown, and further, that we second the movement of the Dane Co. Teachers' Association, for the holding of such convention.

Resolved, That instruction in the principles of Human Physiology should be given in our schools, either orally or by the use of proper text books on that subject.

Resolved. That the proceedings of this institute be published in the "Waukesha Free Democrat," and the other papers of eastern Wisconsin be requested to copy.

The utmost harmony prevailed through the entire session, and the importance of such institutes demonstrated to the satisfaction of all present.

(Signed) CARROLL LUCAS.
Secretary.

Mrs. Caroline Lee Hentz, an accomplished female writer at the south, has taken charge of the literary department of the Columbus, (Ga.,) Sentinel.

Educational Convention.

Pursuant to notice and adjournment, a meeting of the friends of education was held at the Baptist church, in Waukesha, on Wednesday, March 31st, 1852, for the purpose of organizing a Teachers' Institute.

The meeting was called to order by the Chairman, Rufus Clark, Esq. A. Conkling was appointed Secretary. After some interesting remarks respecting the objects of the association, the report of the committee appointed at a previous meeting to draft a constitution was called for, which report was accepted, and each article taken up separately and adopted with amendments. The association then adjourned, to meet at the school room of Carroll College Preparatory Department, at 7 o'clock, P. M.

7 O'clock, P. M.—Met pursuant to adjournment, and listened to some very interesting and instructive remarks from Mr. L. I. Root, on the subject of common school education.—The following officers were then chosen for the present year, viz:

President, L. I. Root; Vice President, S. C. Case; Secretary, C. S. Hartwell; Treasurer, R. B. Hammond; Trustees, Henry Davis, Ira Blood, Israel H. Castle, Rufus Clark, and D. W. Reed.

The institute then adjourned, to meet at 9 o'clock A. M. on the following day, for the purpose of forming a class for the instruction of teachers. RUFUS CLARK, Ch'n.

A. CONKLING, Sec'y.

April 1st, 1852.—Institute met pursuant to adjournment. There being a number of teachers present, on motion of Mr. Davis, it was,

Resolved, That a session of three days be held. Whereupon the services of Mr. Jas. L. Enos, graduate of the New York State Normal School, were secured as Principal.

The chair then appointed Messrs. I. S. Haseltine, A Hartwell and Dr. Sly, a committee to draft by-laws to be presented at the next meeting of the institute.

On motion,

Resolved, That the proceedings of this convention be published in the Waukesha Democrat, Waukesha Free Democrat, Wisconsin Farmer, and such other papers as may favor the enterprise.

After an interesting session, in accordance with the above resolution, during which instructions were given to the teachers by Jas. L. Enos and L. I. Root, the institute adjourned to meet at the call of the trustees.

L. I. ROOT, President.

C. S. HARTWELL, Sec'y.

Waukesha, April 3d, 1852.

TO DISTRICT CLERKS.—Clerks of school districts are authorized to subscribe for magazines and to pay for the same with the library money. As the educational department of the Farmer is the only educational record at present in the state, it is of importance that a copy should be placed in every school library in the state. Clerks will please forward their orders.

EDITORS will confer a favor by calling attention to this fact.

THE HOMESTEAD.—The home of every man is a holy place—one which no law or monopoly should be able to destroy. Give a man a home, in fact and secure, and he will feel that he has position, station, rights and character worthy to defend.—He is a permanent inhabitant of the state, for her interests are his interests. But let the wealthy capitalist be able to monopolize the soil, and seize almost at will the poor man's homestead, and we shall have a moneyed aristocracy to lord it over the people as cruelly as ever the English aristocracy made laborers and dependants by the law of entail. The only ultimate source the masses possess against the sure encroachments of capital upon labor, is to be found in the exemption of the homestead, and the guarantee of the right to labor, by laws founded on the natural rights of man to live.

MATERIAL FOR BLACK BOARD.—The best black boards are those made of hard finish. The mixture is made as follows: Mix with the hard finish, a sufficient quantity of lamp-black, wet with alcohol or sour beer. This can be put on an old wall as well as a new one. The lamp-black will not mix uniformly unless mixed as described above, and when dry will present a spotted appearance.—Such boards should never be wet with water or painted.

The young man who spends all his earnings to appear genteel amongst the ladies, as the fashion is 'bout town, ought to consider that the money which bought that cigar, will be needed to buy a pig when he and that young lady get married; that the buggy-hire would be needed to pay for a load of lumber to build a house; that the extra fine clothing might buy a forty acre lot of land for a home; and that the money you paid for a ball-ticket for you and Miss ——, would come so handy to dress little Alice and Anny.

NORWAY AND SWEDEN.—There are 25 or 30 newspapers in Norway, one of which is published at 71° north latitude, where in one part of the year, the sun does not go down for two months.—Although united to Sweden, Norway has a parliament of its own, of 100 men The government of Sweden has four houses—the house of nobles, in which 1100 are entitled to a seat; the second house consists of 80 clergymen; the third 80 burgesses: the fourth 140 farmers. A bill to become a law must pass *three* of these houses.

Advantages of Mules Over Horses.

Eds. Cultivator—Having of late received several inquiries respecting the advantage of mule labor over that of the horse, and thinking some communication on this subject might be interesting to your readers, I take the liberty of addressing to you my own experience.

For nearly three years, I have made use of two pairs of mules, and most of the time of one span of horses. The present season, I have two heavy spans of horses, the one weighing about 2200 lbs., the other 2350—while the pairs of mules weigh only 1700 and 1900 lbs, respectively. The heaviest pair of mules can outdraw either of the spans of horses, and are now in as good condition as in the fall, while the horses have fallen away very much. In the winter, when taxed to their utmost capacity, the mules are fed 12 quarts of oats each, per day, and the horses 20 quarts; the amount of hay consumed by each being in nearly the same proportion. When not in constant use, the mules are fed little or no grain, and in the summer may be allowed to go unshod without injury. They suffer less than horses from the heat; are not so easily teased by the flies, and are equally hardy to the cold. They are far less subject to disease, and will endure constant labor for a much longer time. As they walk so as to bring their feet almost in an exact line, they are superior for plowing and working between the rows of growing crops, being less liable to tread them down.—When hitched to a load, their walk is more rapid than the horse, and I consider them preferable in almost every particular, except for quick or pleasure driving. The mule is not a gormandizer and if fed sufficiently at night, and it is not convenient to feed again till the next, he experiences no inconvenience.

The first cost of a good pair of mules, is more than a span of working horses; but the mule capital will last for thirty years, while the entire horse capital must be renewed, at least every ten years. My estimate for the relative expense of keeping a horse and mule team, in working order, is as follows:

Span of horses, one year.

20 quarts oats each, per day—451 bushels at 37½ cts	$171 00
5 tons hay, at $8 per ton,	40 00
Shoeing once a month, half new,	18 00
Farrier's bill, on an average,	5 00
Depreciation each year 10 per cent on $200,	20 00
	$254 00

Pair of mules one year,.

12 quarts oats, each per day—273 bus.,	$102 00
3 tons of hay,	24 00
Shoeing once in six weeks, half new,	12 00
Depreciation 3 per cent on $350,	10 00
	$148 50
Making a balance in favor of mules of	$105 50

A mule is no more likely to be vicious than the horse. Their vision and hearing seem to be better, and they never take fright—a danger from which you are never secure with the horse.

The breeding of mules is an extensive business in some of the western states. They are mostly bought by New Haven shippers, and shipped at the age of three years. The market price of unbroken mules at New Haven, Ct., in large lots, is about $80 each. This is the best place to purchase, as they can then be selected from droves, and well matched. At three years old, they will do as much work as a common span of horses, and continue to improve for ten years. It appears to me that farmers might save much by substituting mules for horses.

I suppose that in the United States there are three millions of working horses, whose place might be equally well supplied by mules. In my estimate, I made the balance in favor of the mule over $50 yearly; but allowing it to be only $20, the annual saving of expense would be sixty million dollars. [Cor. Albany Cul.

American Genius.—Harrison Winans left Baltimore a few years ago a poor boy, but with an improved mind, acquired at a country school, with genius, ambition and enterprise. He worked in Europe to the head of the machinists and engineers, and became a leading contractor on the great railroad between Moscow and Petersburgh, 400 miles long. He has made over $1,000,000.—On his return to Paris, he married a talented, amiable and beautiful lady, and will soon build a cage for her, in the shape of a villa, for all kinds of mechanics, and a park of 3 acres beautifully ornamented, where rich and poor may feast their eyes on indigenous plants and rare exotics. He goes again to Russia to fill a contract with the Emperor on public works by which we will bring $500,000 in gold for his *mental* labors.

[Washington Telegraph.

A. Remarkable Hen.—A gentleman of our acquaintance, in marketing a day or two since, bought from a wagon a hen of ordinary size and appearance, but the grert weight of which excited his curiosity, and upon having it killed and cleaned, a remarkaple fact was disclosed, and its extraordinary weight accounted for—the creature was found to contain *twenty-five eggs*, eighteen of which were of full size, with yolks and whites although their shells were still soft; the remaining eight were of a yellow color, and varied in size from that of a hickory nut to that of a cherry. This remarkable bird was purchased in the Charleston market from Mr. Bradley, the keeper of the Four Mile House, near this city, and has been returned to his hands for the inspection of his customers and the curious in such matters

[Charleston, (S. C,) News.

Weights and Measures.—The following table of the number of pounds of various articles to a bushel, may be of interest to our readers:

Of wheat, sixty pounds.
Of shelled corn, fifty-six pounds.
Of corn on the cob, seventy pounds.
Of rye, fifty-six pounds.
Of oats, thirty-six pounds.
Of barley, forty pounds.
Of potatoes, sixty pounds.
Of bran, twenty pounds.
Of clover seed, sixty pounds.
Of timothy seed forty-five pounds.
Of hemp seed, forty-four pounds.
Of buckwheat, fifty-two pounds.
Of blue grass seed, fourteen pounds.
Of castor beans, forty six pounds.
Of dried peaches, thirty-three pounds.
Of dried apples, twenty-four pounds.
Of onions, fifty-seven pounds.
Of salt, fifty pounds.

NATURAL HISTORY

Black Birds.

BY P. R. HOY, M. D., OF RACINE, WIS.

Under this head we include the Rusty Cow-pen, Red-wing, Yellow-breasted, Bobolink and Crow Blackbirds, of this state. This tribe of gregarious birds is in bad repute with the farmer, generally. They are denounced collectively, and individually, as a set of arrant thieves, worthy of death "without benefit of the clergy." They are accused and convicted without a hearing, of pulling up young corn and other grain, in the spring—of destroying oats, buck-wheat and corn, in the fall, to the great damage of the agriculturist.

Now, granting the accusation in the main to be true, we believe "the laborer is worthy of his hire." And in view of the vast number of those ininsects, and their larvæ, the most injurious to the husbandman, which they annually destroy as their principal food, especially in the spring, the very season when their labours would be most successful in view of these great benefits, we consider the much slandered and much persecuted *Blackbird* as our best friend—worthy our protection, and the small pittance they claim of the more abundant harvest we reap, in consequence of their valuable assistance.

Were all this tribe of birds exterminated, we should quickly be made sensible of the incalculable value of their labour. As one of the many proofs of this position, that might be adduced, we refer to the testimony of Kalm, who states, that after a great destruction made among the Blackbirds for the legal reward of three pence a dozen, the northern states, in 1749, experienced a complete loss of the grass and grain crops, which were, however, destroyed by myriads of insects. The bounty was wisely repealed, and the birds welcomed back with joy, as the farmer's best friends.

The Fishes of Ireland.

If fish could make a country happy, Ireland would be a "Happy Valley," or a Garden of Eden, or a Utopia, or any thing else of which poets or philosophical romancers have dreamed when fresh from contemplating the state of man. There are fish enough in and about the island (appropriately named the green) to feed all her people, on feast days as well as fast days, for countless generations.—There is hardly a member of the finny race proper to northern waters which cannot be found either in the rivers or lakes or brooks of the country, or on the coast, in the waters which encompass it about one side. The sea fairly swarms with cod, haddock, herring, mackerel, soles, halibut, eels, ling, plaice, dores, whiting, pollock, pilchards, hake, sprats, skate, bream, &c. Then there are salmon, turbot, trout and mullet in abundance. Oysters and lobsters are there, and might be made to yield great returns.

Among the larger fish is the basking-shark or sail fish, which yields a valuable oil, and which grows to the length of almost 50 feet. Shark as it is, however, "the monster is a very harmless monster, and likes to lie lazily stretched out on the surface of the sunny sea, now on his shining white belly, and anon, like a tired swimmer, on his broad, dark lead, colored back, and apparently unconscious of guile, will suffer himself to be approached, and sometimes even stroked with the hand; but when he feels the harpoon, down he dives into the deep blue depths, at first rolling in agony upon the ground to detach the deadly steel, which is often bent by the exertions of the victim, and then, when he finds his efforts unavailing, rushing a-head with a velocity and power that has been known to tow a boat of 70 tons against a fresh gale. On ordinary occasions, however, the fish swims leisurely with the back fins out of the water (whence the name of sail fish.) They sometimes disport themselves on the surface, leaping high above the waves, and failing back with a loud crash." [Boston Rambler.

BURNING OUT STUMPS.—Where there are but a few stumps in a field the stump machine cannot always be used advantageously, and the expense of applying it would exceed the advantages. I have found that large stumps which it is not practicable to remove by ordinary means, may very easily be got rid of by the following simple process. After a period of dry weather, when the exposed portions of the stump are dry and tindery, cover it with a quantity of dry combustible matter, such as shavings, small sticks of wood, rubbish of any kind, and sprinkle over and through the mass, a few pounds of rosin, or a bucketful of tar. Over this place a close and compact laying of turf, grass side in, in the same manner as the covering is applied to a coal pit, and ignite the wood through an opening at the base—a hole being left at the top to produce the requisite draught till the fire is fairly kindled. Manage just as you would were you burning a coal-kiln, and let the burning continue till the *stump and its roots* are completely consumed. The ashes will make a good top-dressing for the adjacent soil, and the obstacle will be removed effectually, and at a small cost. An hour's labor will do it.

[Cor. Germantown Tel.

EDITOR'S TABLE.

ERRATA.—On page 110 two errors were overlooked in correcting proof, before a part of this No. had been printed. In the 3d paragraph, 7th line, read *coat* for cool—fifth paragraph. 8th line, read *green* for queen.

$100 Buck—A Liberal Offer.

Very much has been written, said and sung, of the trials, perplexities, and tribulations incident to the life and avocation of a publisher and editor—how little of heart-sympathy he receives, and how much of neglect and coldness from those whom he serves in faithfulness, according to the measure of his ability. There is a deal of truth in this, as we well know; but there is a bright side to the picture, and this life and avocation has its good as well as evil things, and he who toils well, fails not of his reward. In our own case, though we have often experienced the bitter, we have quite as frequently tasted the sweet.

See how it is now! We were sitting down in our *sanctum*, and hopeful as we are, were contemplating with something of sadness, the dark side of things. Our thoughts were on the unpropitiousness of the times—the past history of our enterprise—where, were the kind and considerate friends who would stay up our hands and impart to us new courage? Not that there was any real cause for this, or, that the prospect really was gloomy, but such was the direction of our thoughts; when a goodly number of letters from the day's mails were laid upon our table, the hand writing upon one of which we readily recognized. It was from our excellent friend, ERASTUS W. DRURY, Esq., of Fond du Lac, whose whole heart is in the great agricultural cause, and of whose kindness we have often been a recipient. In consideration of our labors, (and duly appreciating the same, of course,) he proposes to present us with a choice BUCK, from his flock, valued at ONE HUNDRED DOLLARS—provided, nevertheless, that we furnish ourself with an EWE of equally good stock and blood. Who, now, will further commiserate our poverty and complete the sum of our joy, by helping us through with the proviso?

Tendering our very warmest thanks to friend DRURY, for his truly liberal offer, and the honor he has done us, we stand with our hat in our hand, ready to make our lowest bow, and our grateful acknowledgements to the yet unmanifested friend, who shall "go and do likewise."

WISCONSIN STOCK FAIR.—We would call the attention of our readers to the notice, in our advertising department, of the sale of stock at Taycheedah, which will take place on the 12th, 13th and 14th days of this month, for the sale of horses cattle, sheep, &c.

Cheap Wash for Cottages.

For the outside of wooden cottages, barns, outbuildings, fences, &c., where economy is important, the following wash is recommended:

Take a clean barrel that will hold water. Put in it half a bushel of fresh quicklime, and slake it by pouring over it boiling water sufficient to cover it 4 or 6 inches deep, and stirring it till slaked.

When quite slaked dissolve in water, and add two lbs. of sulphate of zinc, (white vitriol) which may be had of any of the druggists, and which, in a few weeks, will cause the whitewash to harden on the wood-work. Add sufficient water to bring it to the consistence of thick whitewash. This wash is of course white, and as white is a color which we think should never be used except upon buildings a good deal surrounded by trees, so as to prevent its glare, we would make it a fawn or drab color before using it.

To make the above wash a pleasing cream color add 4 lbs. yellow ochre.

For a fawn color take 4 lbs. umber, 1 lb. Indian red, and ½ lb. lampblack.

Lampblack, when mixed with water colors, should first be thoroughly dissolved in alcohol. Yellow ochre, Indian red, &c, are sold, in dry powders, at a few cents per pound.

To make the wash gray or stone color, add one lb. raw umber and two lbs. lampblack.

The color may be put on with a common whitewash brush, and will be found much more durable than a common whitewash, as the sulphate of zinc sets or hardens the wash.

Cheap wash for Cottages of brick, stone, stucco, or rough-cast. Take a barrel, and slake half a bushel of fresh lime as before mentioned; then fill the barrel two-thirds full of water and add a bushel of water lime.—Dissolve in water and add three pounds of sulphate of zinc. The whole should be of the thickness of paint, ready for use with the brush. This wash is improved by the addition of a peck of white sand stirred in just before using it. The color is a pale stone-color, nearly white.

To make it fawn color, add 1 lb. yellow ochre, 2 lbs. raw umber, 2 lbs. Indian red.

To make it a drab, add 1 lb. Indian red, 1 lb. umber, 1 lb. lampblack.

This wash, which we have tested thoroughly, sets and adheres very firmly to brickwork or stucco, is very durable, and produces a very agreeable effect.

[Downing's Architecture.

☞ Lying rides on debt's back.

RACINE COUNTY DEMOCRAT.—Such is the title of a new political paper hailing from the "Belle City," of the west. It is got up in good taste; typography good, selection excellent, &c., published by Hulette & Cary; two industrious and enterprising young men. We suppose the Democrat to be the mouth-piece of the old school section of the Democratic party of Racine Co.

RACINE DEMOCRAT is another new paper just issued at Racine. Published in German, by Kohlman and Brother. As it is all Greek to us, we cannot speak of its ability. It is neatly printed and should be sustained by the German population of Racine county.

THE LITERARY MISCELLANY, comes with its usual promptness, and overflowing with gems from its talented contributors.

THE YOUTH'S CASKET.—We wish this elegantly illustrated periodical might be a regular visitor to the children of every family, for its pages are filled with instructive articles of a moral and entertaining character, calculated to exert a beneficial influence on those for whom it is designed. Published at Buffalo, N. Y, by Beadle & Vanduzee.—Edited by Harley Thorne. Price, 50 cents per year.

GODEY'S LADY'S BOOK, for May. A mammoth magazine, truly! The present No. contains 120 pages of letterpress, 4 full page plates and several small engravings. The ladies will of course appreciate Godey's efforts to serve and please them.

WESTERN RESERVE FARMER & DAIRYMAN.—Such is the title of a new co-laborer in the field, published semi-monthly at Jefferson, Ashtabula Co., Ohio. N. E. French, editor; R. M. Walker, Assistant; G. B. Miller, publisher — $1,00 per year. It promises to be an efficient assistant to the cause of agriculture in the old Buckeye state. We place it in our exchange list and wish it abundant success.

THE WATER CURE JOURNAL.—The reception of this work is gratefully acknowledged. We only wish *it* and kindred works were more universally circulated and read by the American public.—However, we trust the grand *principles* of hydropathy are so rapidly gaining ground, that the great mass of our people will soon understand the laws of life and health, as taught by this system.

THE PHRENOLOGICAL JOURNAL, is always hailed with a *welcome* to our "sanctum." Its pages are replete with instructive and entertaining matter.

The Book Trade, with its usual list of new books is received. To those who desire to keep posted up in the issue of new works we would say subscribe for the Book Trade. Price 25 cents per annum. Wilson, N. Y.

SIMPLE REMEDY.—The simple application for a horse's feet which are brittle, or hoof bound, I learned from an English shoer, and having tried it with good effect, and never having seen it fail, I send it to you to be used as you may deem proper.

Mix equal parts of tar and some soft grease, having the foot clean and dry; apply it hot, but not boiling, to all parts, letting it run under the shoe as much as possible. In bad cases, the application should be made every day for a week, and then two or three times a week, till the foot becomes strong and smooth.

TO FRY POTATOES.—The usual practice of frying potatoes until they are brown and crisp, is an abominable one. Fried potatoes, to be of the right sort, should be boiled, and when cold, cut in slices, sprinkled with salt and pepper, and thrown into a pan containing an abundance of hot fat. They should be left in the lard only a sufficient length of time to heat them thoroughly, then taken out, thrown into a cullender to drain, and served up as soon as ready. Try this plan.

A small piece of paper or linen, just moistened with spirits of turpentine, and put into the wardrobe and drawers, for a single day, two or three times a year, is said to be a sufficiet preservative against moths.

EVERTON TOFY.—Take a quarter of a pound of fresh butter; put it into a pipkin, and melt it over a gentle fire; then add half a pound of brown sugar; stir them well together, and keep them over the fire for ten or twelve minutes, or until some of the mixture, dropped into cold water, sets hard.—It may then be poured out into tin moulds, or on a sheet of writing-paper with the edges folded up, previously rubbed with butter.

Nine ounces, says the Scientific American, of pure, fresh lime, dissolved in forty gallons of water; will purify five hundred and sixty gallons of hard water; the precipitate is chalk. It takes 16 hours for the water to settle; all the impurities to fall to the bottom of the vessel which contains the water. This is a useful fact in chemistry, and is not very extensively known.

VEGETABLE POISONS.—Mr. E. S. Fox, of Athens, New York, publishes the following: "Almost every farmer is more or less troubled with poison ivy, sumach, parsnip, and the like, from which I have suffered very much myself, and after trying a great variety of remedies, have found out that a poultice made of buckwheat flour and buttermilk, with a piece of blue vitriol the size of a pea, pulverised and dissolved, added to the mixture, has had the happy effect of removing the trouble, and effecting a cure in a short time.

HOW TO MAKE A GOOD CUP OF TEA.—M. Soyer recommends that before pouring in any water, the teapot, with the tea in it, shall be placed in the oven till hot, or heated by means of a spirit lamp, or in front of the fire (not too close, of course,) and the pot then filled with boiling water. The result, he says, will be, in about a minute, a most delicious cup of tea, much superior to that drawn in the ordinary way.

☞ There is only one paper in Egyt—a small monthly sheet, in the Arabic language, at four dollars a year. It is devoted mainly to the powers that be, and every one in the employ of the Pacha is obliged to subscribe to it.

TELEGRAPHS IN THE UNITED STATES.—There are already in the United States and Canada more than 12,500 miles of wire, involving a capital of more than $3,000,000. To work these lines, cost annually 720 tons of zinc, worth $56,000. More than a million pounds of nitric acid, worth $117,800, and $27,000 worth of mercury, besides a considerable value in sulphuric acid, &c. On the line from Pittsburgh to Cincinnati alone there were transmitted, in the year 1850, 364,559, paid despatches, and the revenue received was $73,278.

BACK NUMBERS.—We have completed the reprint of the Janury and February No's. and shall forward them to such subscribers as have not already been supplied. Should any fail to receive them with the May No., they will please notify us. We have several hundreds of names upon our books to supply, interspersed with those who have received the back numbers in full, and although all the care possible, has been observed it would not be strange if omissions and duplicates should occur in some cases.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., JUNE, 1852. NO. 6.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER.

TERMS:

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(Less than one year,) for first insertion	2 50
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OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

Things in Illinois.

FRIEND MILLER—"The people of the state of Illinois"—the dwellers in "Egypt"—are about to ask their wise men for an INDUSTRIAL UNIVERSITY—for an institution which shall be to the merchant, the mechanic and the FARMER, what West Point is to the soldier and civil engineer—and the old colleges to the divine, the lawyer and the man of medicine.

Have you a word of encouragement for us?—Your state has the start of ours in the matter of a State Agricultural Society. Will you help us to get the start of the old states in establishing a state school for the specific education of the producers of the State?

I trust you are too "fresh from the people," and have too much confidence in western work, and western enterprise, to believe—with older editors—that we should wait for the action of older states.

Ideas mature into acts, in new countries, while the originators of these see them fade into illusions, under the tyranny of old custom in old communities. WESTWARD, Ho! is the word of to-day; and states of the Northwest must be pioneers in testing industrial education, as their inhabitants have been, in enlarging the "area of freedom," and working out the "manifest destiny" of a new race of intelligent beings.

Give us your sympathy in our hopeful efforts, and if we must fail, like "New York and Massachusetts," let it not be from lack of sympathy in our press, with the great thought of industrial education—or in other words, "specific education" for hand-workers, as well as specific education for head workers. No one objects to the latter, but when we ask for a like privilege for the former, we are met by "the doctors" with the cry of "danger to established institutions, and the general good," growing out of a feature which *they* have found very convenient and satisfactory, when enjoyed by *themselves* exclusively. But I can't write, and have no right to think, according to this old doctrine. Yours,

JOHN A. KENNICOTT.

Northfield, Ill., May 20, 1852.

Carrots.

Carrots may be sown as late as the 10th of June, and have ample time to mature their growth, in this section of country, where our long mild autumns favor the late growth of plants. When sown late, they are much superior in flavor and keeping qualities for winter use, and the seed is less liable to rot in the ground. Carrot seed is slow to vegetate; requiring under favorable circumstances about three week's time; hence if the soil is wet and cold, the seed will perish before it will germinate. We hear more complaint of the failure of carrot seed to grow, than any other, and we think the cause, may probably quite as often be traced to, *too early sowing* or an *improper selection and preparation* of ground, as to worthless seed. To get good crops, the soil should be a deep, dry, rich, sandy loam, deeply dug or prepared by subsoiling.

We should think the method of cultivation detailed in the following article from the N. Y. Farmer an excellent one; especially when the ground to be sown, is wet and difficult of drainage:

"How shall we sow them so as to cultivate them with the greatest economy of labor, manure, &c?

A neighbor tried the following method the last season. He is a man of good judgment and some little experience, and speaks very favorably of his success. After preparing his land in the usual way, by spreading manure, &c., he sowed a part on a level bed as is most usual; the other part he ridged in the following manner: Taking a double mould board horse plow, he passed with it between where he would have his rows, the plow making half a ridge on each side as he passed—or completing the ridge on one side and making a new half on the other. He then sowed his seed

on the apex of the ridge. The surface being light, a depressed hollow was made by the seed sower as it passed over the ridge. When the carrots came up so as to see them, he levelled the shoulders of the ridge left by the seed sower with a hoe, stirring the ground between and on the sides of the rows to kill the starting weeds. When the plants were large enough to weed and thin out, the refuse was dropped between the ridges and by slightly hoeing the sides down upon the weeds they were covered up to rot. The work of weeding and thinning was not so laborious for the back and muscles, as those sowed upon a level. Then again he left them thicker, as they grew and wanted room, they pushed each other sideways, and being on the ridge the ground would easily give, and afford them room to enlarge. In harvesting, the labor was still less than those on the level plats, as any one would suppose. He thought the yield superior, and the labor less. Another neighbor, on an experiment, manured his carrots and beets with salt and plaster, and had a good yield of superior articles. There is not the shadow of a doubt that on many of our lands an application of mineral manures is the thing wanted. Who will get up an essay showing the importance of mineral manures in the health and production of our vegetables and *even animals?*"

Manure for Wheat.

Mr. Way, consulting chemist of the Royal Agricultural Society of England, has analysed about fifty specimens of different sorts of wheat, and has come to the conclusion that an average crop of wheat takes out of the land the following inorganic substances:

84 lbs. of silica,	6 lbs. of magnesia
20 lbs. of phosphoric acid,	1 lb. of peroxide of iron,
4 lbs. of sulphuric acid,	23 lbs. of potash
8 lbs. of lime,	1½ lb. of soda.

It will be seen that the most important ingredients of wheat are phosphoric acid, and the alkalies, potash and soda. If these were returned to the land in sufficient quantity, the minor mineral ingredients, such as silica, lime, magnesia, iron, &c., would in the greater number of cases be supplied by the soil. The phosphoric acid would be most conveniently returned in bone dust, which contains from 50 to 60 per cent. of the phosphates. The alkalies might be supplied singly in the shape of nitrate of soda or nitrate of potash (saltpeter.) Guano is valuable, inasmuch as it comprises not only a large proportion of phosphates and alkalies, but also what is of great importance, particularly to the young plant, a considerable portion of ammonia. The principal organic substances he found to be carbonic acid and nitrogen, both of which exists in the air; but it is from the ammonia of decaying animal and vegetable substances that plants derive their principal supply of nitrogen, ammonia being composed of nitrogen and hydrogen. When a plant is burned, the organic portions fly off into the air, whilst the ashes comprise the mineral or inorganic ingredients. Ammonia was essential to the growth of wheat, and this might be supplied to lands which abound in all the mineral ingredients, in the shape of sulphate of ammonia, which might be manufactured from the liquor obtained from the gas works of every town.

[Ex. paper.

Culture of Turnips—How to Get Rid of the Fly.

The culture of turnips has so completely changed the character of our husbandry, and is of such vast importance to us, that anything affecting the welfare of this staple root cannot be of trivial importance. The cleaning of the land, manuring, season of sowing, &c., are pretty generally under control; but, "*O the fly!*" that terrible scourge, what is to be done when it sets to work? Tarred boards are drawn over the field to trap the jumping vermin, for flea-beetles are nimble as their namesakes, and very little driving gets them to a gallop; but although the tarred wood traps thousands, myriads are left unmolested to do the work of destruction. All sorts of remedies have been proposed to meet this giant evil, and anything that would lessen the chances of loss, such as rich manures to hasten the plant into rough leaf, are eagerly sought after; and various wiseacres have unrevealed wrinkles of their own, that the uninitiated, and particularly the editors of agricultural papers and lecturers, shall never know. The following plan of attack upon the turnip flea-beetle is worthy of some consideration, since its operations are all above board, and the fight is in open day. The besieged, although encased in pretty good mail, like other beetles, finds to his dismay, that the slow hound is at his heels, and that there is no rest for the sole of his foot whilst such an army has possession of the (turnip) field. Our moorland hind scratched his pate and studied hard to match "*the fly.*" Brimstone was put upon the damped seeds until they shone like gold, but still "*the fly*" would taste the seed leaf after all, and seemed to have it all his own way until the hind, taking the hint from tales of life in India, where certain species of ants infest every place, and reign supreme for the time, driving all before them, went to the ant-

hills in the woods and filled sacks of ants, and, with gloves on his hands, turned them down in little heaps, at regular distances, over the field; and whether it were the work of the ants or to be ascribed to other causes deponent sayeth not, but the crop was seldom seriously injured in this hind's lifetime, and he never failed to call in the dogs of war to his assistance when the weather threatened to be dry after turnip sowing. In gardening, the above remedy would be perfectly practicable, but upon large farms it would be a tedious affair. [Farm. Mag.

Pulverizing Soils.

It is believed, and indeed the fact has been abundantly demonstrated, that the finer the soil is, the more fertile will it be. Tull supposed that minute disintegration or communication was all that was essentially necessary to render any land productive and fruitful, and that no matter what might be its original character, the plow, freely used, would render the application of stimulating manures or *pabulum* of any kind, unnecessary. This, however, even his own experiments, instituted for the express purpose of establishing the variety of his idolized theory, prove untrue. Still, in all cases, minute pulverization is a vast benefit to any soil; and the more perfect the comminution or division of the constituent particles is, the more confidently can we rely upon the success of the future crop, whatever it may be.

By frequent plowings, even the most tenacious and adhesive lands will be ameliorated; they will be exposed more thoroughly and effectually to the fertilizing effects of dews, rains, atmospheric influences, and the enriching action of solar heat The roots of plants find also in soils thus prepared a much more favorable medum; they are not arrested in their progress, expand freely in quest of food, and are not contorted and thrown aside by opposing obstacles which are insuperable to a slender form. Manure also acts much more energetically on fine soil than on that which is coarse and in compact masses; it does not so soon yield its humidity in seasons of drought, and is far more absorbent in time of rain.

[Democratic Union.

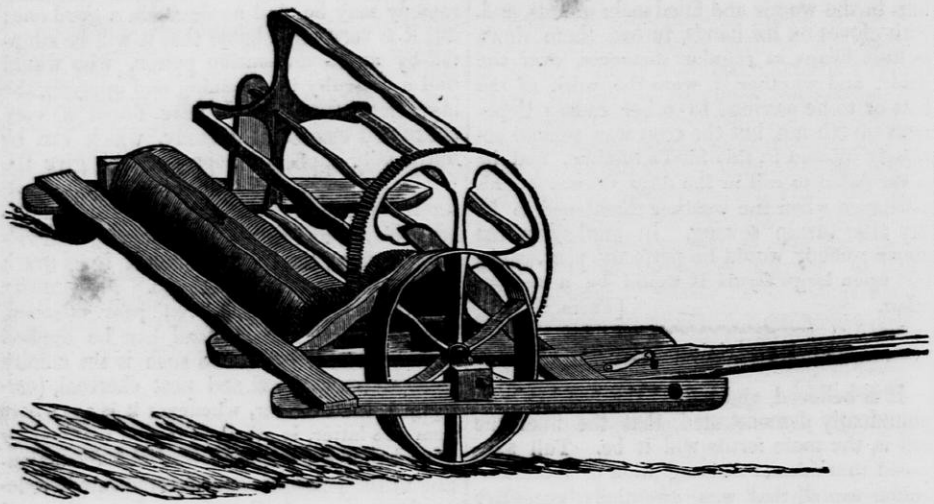
On Fixing Ammonia in Stables.

Sir—Mr. Reed, in his letter in your paper of to-day on the above subject, recommends sulphate of lime, moistened with diluted sulphuric acid, as an absorbent of ammonia, that volatile gas which affects the vision of, and produces many diseases in, horses. Mr. Reed's remedy may be, and no doubt is, a good one; but it is very improbable that it will be adopted by any non-scientific person, who would find a difficulty in obtaining and applying the ingredients; and as I have found a very cheap and efficacious remedy, which can be universally applied, I hope you will give the public the benefit of publishing in your columns the means of obtaining a sweet and wholesome stable, and so prevent injury to that valuable animal, the horse, which it is as much our interest as our duty to do. My remedy is granulated or powdered peat charcoal, which is very cheap, and can be applied by every stable boy; and such is the affinity between ammoniacal and peat charcoal, (carbon,) that the former, whenever it is anywhere near the latter, is attached to and retained by it, and thus the serious evil of the dissemination of the poisons is entirely eradicated; independent of which, the mixture forms the most valuable manure, and will amply repay the expense of the trivial alteration which it will be expedient, but not indispensable, to make, by excavating under the center and end of the stall to a depth of about twelve inches, and partially filling up the excavation with the charcoal, (the communication from the center to the end being by a simple drain,) which will entirely absorb and deodorize the gas. The specific character of the above remedy can easily be proved, by placing in the stable, near to one of the drains, a small quantity of charcoal, say two inches in depth, *on* a square piece of tin of about eighteen inches in size. After an exposure of a few minutes, an analysis would prove that this charcoal had absorbed its own weight of this deleterious gas; and if this intermixture were used in the garden or conservatory, its beneficial effects would be manifest to the most casual observer.

[London Times.

Preserving Butter.—The farmers in the parish of Undy, in the county of Aberdeen, Scotland, practice the following method for curing their butter, which gives it a great superiority over tha tof their neighbors:

Take two quarts of the best common salt, one ounce of sugar and one of saltpetre; take one ounce of this composition for one pound of butter; work it well into the mass, and close it up for use. The butter cured with this mixture appears of a rich and marrowy consistence and fine color, and never acquires a brittle hardness nor tastes salty. Mr. Anderson says: "I have ate butter cured with the above composition that has been kept for three years, and it was as sweet as at first." But it must be noted that butter thus cured requires to stand three weeks or a month before it is used. If it is sooner opened, the salts are not suffieiently blended with it, and sometimes the coolness of the nitre will be perceived, which totally disappears afterwards. The above is worthy the attention of every dairy woman.



Flax Puller.

The above engraving represents a machine for pulling flax, recently invented by SAMUEL B. GOSS of Beloit. The main parts of the machine are a revolving reel and cylinder. The reel has four arms, and makes one revolution, while the cylinder makes two. The cylinder has two arms, resting upon steel springs, imbedded into it, on opposite sides, corresponding in length and width to the arms of the reel, the faces of which, when in their natural position, are elevated a little above the surface of the cylinder. The reel and cylinder revolve in opposite directions, by means of gearing connecting with the large wheel, upon which the frame of the machine rests. The machine is propelled by horse power, in the same manner as a grain reaper. The flax is gathered by the arms of the reel, *A*, and brought between them and those of the cylinder, *B*, where it is held by the pressure of the springs upon the arms, with sufficient firmness to pull it from the ground, and deposit it behind the cylinder as the machine moves forward.

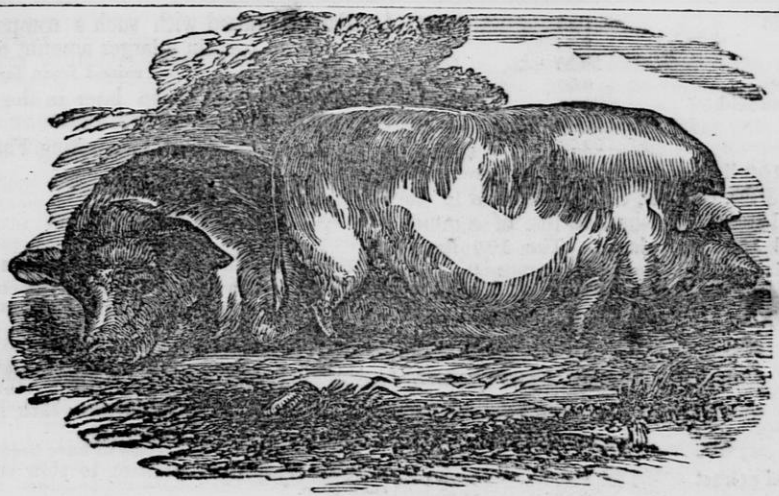
Of the practical utility of this machine we are unable now to speak, as we have never seen it in operation. But we intend to avail ourself of the invitation of the inventor, to witness its working, when the season for harvesting flax arrives. The increasing interest in the cultivation of flax, as a staple product, and its manufacture, will create a new demand for time and labor-saving machinery. The practice of hand pulling, heretofore so universal, (and practicable with small fields,) will be found to expensive in this country, owing to the scarcity of labor and consequent high wages.—Cradling has been proposed, but if the flax is raised for the *fibre*, much waste must result from this mode of harvesting, as no inconsiderable amount of its weight must be lost in the stubble and roots left standing on the ground. The use of the reaper is still more objectionable, as it will leave a still greater length of stubble.

We are informed that this machine will pull about 10 acres of flax per day.

MACHINE FOR PRESERVING BUTTER.—The St. Louis Republican states that Mr. E. H. Merryman has invented and patented a machine by which he is enabled to restore to its original sweetness the most rancid butter. It is also designed for preparing and packing butter. It consists simply of two rollers in immediate contact with each other, operated by a crank and spur-wheels. They are placed in a trough and partly submerged in water. As the butter passes between the wheels, every particle is brought into immediate contact with the water, which washes away the buttermilk as fast as it is pressed out. After this it is only necessary to salt and pack it away in close vessels, and it will be preserved sweet and pure for a long time. The machine occupies a space of about four feet by two, and a single person can work with it seven hundred and twenty lbs. of butter per hour. Rancid butter put into it comes out completely divested of all rancid taste or smell.

NEW STIRRUP-IRON.—Among the gold medals awarded by the American Institute in New York the present year, was one to Mr. Nathan Post, of East Cleveland, Ohio, for a new stirrup. Its excellence consists in a spring-guard, which allows the foot to go into the opening only a certain distance. This guard, by means of a center tube and screw, may be elevated and lowered to allow the foot to go in a greater or less distance. There are various other contrivances, and its whole effect is, that, if the rider is thrown from his horse, it is impossible for his foot to stick in the stirrup, for the guard throws it out at once.

[Scientific Am.



Gruop of Chinese Pigs.

We insert the above cut more as a matter of curiosity, than with any desire to recommend this breed. There are two distinct varieties, the white and the black ; both fatten readily, but from their diminutive size, attain no great weight. They are small in limb, round in body, short in the head, wide in the cheek, and high in the chine ; covered with very fine bristles growing from an exceedingly thin skin ; and not particularly symmetrical, for when fat, the head is so buried in the neck that little more than the tip of the snout is visible. The pure Chinese hog is too delicate and susceptible of cold ever to become a really profitable animal in this country ; it is difficult to rear, and the sows are not good nurses ; but one or two judicious crosses have in a manner naturalized them.

This breed will fatten readily, and on a comparatively small quantity of food ; and the flesh is exceedingly delicate, but does not make bacon, and is often too fat and oily to be generally esteemed as pork. They are chiefly kept by those who rear sucking pigs for the market, as they make excellent roasters at three weeks or a month old. Some authors point out five, some seven varieties of the Chinese breed, but those are doubtless the results of different crosses with our native kinds. The above cut, with several others purchased expressly for our columns, were taken from the living originals for the International Magazine, published at New York.

[N. E. Farmer.

A Pyramid of Tobacco. — The world smokes and chews every year, *one thousand tons* of tobacco.

Parsnips.

This valuable root is daily gaining favor with our farmers, and all information relative to its composition or mode of culture, is eagerly sought after.

The following analysis is by J. H. Salisbury, M. D.

Laboratory N. Y. State Ag. Soc.

The plants analyzed were very large, roots fleshy and finely flavored. They were furnished by Mr. Dow, of Greenbush. The average length of the roots, 12 inches ; average widest diameter, 3 inches ; average length of tops 28 inches.

Per centage of water, dry matter and ash.

	100 parts of fresh root.	100 parts of fresh tops.
Per cent of water	81.312	89.125
" dry matter	18.688	10.875
" ash	1.280	1.760
" ash in the dry matter	6.850	16.184

The parsnip root contains a larger per cent. of water than the potato, and a smaller per cent. than the turnip, carrot and beet. About 18½ lbs. in the hundred is dry matter—the rest is water. The tops contain nearly 11 per cent. of dry matter ; 7,812 lbs., or almost four tons of the fresh roots, yield 100 lbs. of inorganic matter, 5,682 lbs., or less than three tons of tops yield 100 lbs. of inorganic matter.

Composition of inorganic matter of the Parsnip.

	100 lbs. of the ash of roots.	100 lbs of the ash of tops.
Carbonic acid	21.85	23.51
Silicic acid	0.45	0.92
Phosphoric acid	15.10	4.31
Phosphorate of iron	0.65	1.43
Lime	3.35	1.2$_2$

Magnesia	1.60	0.51
Potassa	8.45	5.33
Soda	38.30	45.32
Chlorine	0.60	3.13
Sulphuric acid	8.95	3.02
	99.20	98.80

The 100 lbs. of inorganic matter removed by 7.813 lbs. of roots, can be returned to the soil by 100 lbs. of ashes, 40 lbs. of common salt, and 15 lbs. of plaster. The 100 lbs. of inorganic matter removed by 5.682 lbs. can be returned by adding to the soil 60 lbs. of ashes, 90 lbs. of common salt, and 10 lbs. of plaster.

Proximate organic composition.

	100 parts of fresh roots.	100 parts of dry roots.
Water	81.312	
Fibre	5.325	28.118
Sugar and extract	8.800	46.603
Dextrine	2.195	11.300
Casein	0.150	0.793
Albumen	0.925	4.884
Starch	1.396	7.364
Resin	0.095	0.501
Gluten	0.040	0.211
Yellow coloring matter	0.020	0.106
Fat	0.022	0.119
	100.25	100.000

Besides the above mentioned bodies, the root contains a small quantity of malic acid, and a principal which imparts the peculiar odor to the parsnip.

The root contains a larger per cent. of starch and dextrine than the beet, carrot or turnip, but less sugar and albuminous matter.

From the foregoing it will readily be seen that Phosphoric acid, Lime, Potash, Soda, Chlorine, and Sulphuric acid, are the leading requisites of soil for this crop. The soil should also contain so much organic as will render it free to atmospheric influence, and to be percolated by the long tap-roots.

By decomposing swamp muck with the chloride of lime and carbonate of soda (lime and salt mixture,) which we have so often recommended, the necessary chlorine, soda, and lime, would be furnished. To this should be added bone-dust or apatite, dissolved in sulphuric acid, supplying by this means both phosphoric and sulphuric acids. Wood ashes may now be added to supply the potash, or what is still better, Peruvian guano, thus securing the necessary quantity of potash in addition to the other constituents, all of which are wanted for maximum crops. The ammonia of the guano will be changed to sulphate and phosphate of ammonia by the bone-dust prepared with sulphuric acid, and thus retained in the soil until needed by the parsnips instead of being lost by evaporation.

Parsnips raised with such a compost, will be found to contain a larger amount of nutritious matter than those raised from farm-yard manures, and to keep later in the season without becoming soft.

[Working Farmer.

Plowing.

BY R. B. HUBBARD.

How oft should the earth be disturbed by the plow? This is a question of much practical importance to the farmer. Plowing is an expensive operation, and unless beneficial, should be avoided as far as possible.

Hesiod, a cotemporary of Homer, states that the Greek farmers plowed their ground three times for each crop. First in autumn, then in early spring, then just before planting.

With the Romans it seems to have been a common if not invariable practice, to plow twice for each crop.

In modern times, the fallowing of ground for winter grain is a common practice, both in Europe and America. Now what is the object of this fallowing, as it is termed? If it be simply to pulverize the soil and render it pliable, that might better be accomplished by plowing once and harrowing. This is not the object—certainly not the sole, nor the principal object. 'Tis to convert whatever vegetable matter may have grown from the soil into nutriment for the new crop. Farmers often speak of letting the land *rest*, as though, like an animal, it would regain strength by repose.

This I deem to be incorrect. Take a quantity of earth and place it under an exhausted receiver, and there suffer it to remain a century. It will contain no more strength, no more fertilizing properties, than before. But allow it to be exposed to the atmosphere for one day, and it will gain strength.

That the air is the principal source of fertility can easily be shown. Allow a piece of ground, which has become so exhausted that it will not pay for cultivation, to remain at rest, for some thirty years, and what do you find upon it? From thirty to fifty cords of vegetable matter, besides the stumps and roots with which the earth is filled. And this is not all. Upon removing the wood it will be found that the soil has become rich with fertilizing matter, and that for a number of years it will produce large crops of grain and grass without manure. Whence comes this fertility? From what source has this exhausted soil derived the materials for such crops?

Let us subject the product to the test of fire.—The wood is consumed and there remains but the ashes. As I have before remarked, less than *one-tenth* of the material of which the wood was composed remains. The other *nine-tenths* have assumed a gaseous form, and have mingled with the atmosphere, to be wafted to other fields and to enter into the composition of other vegetable matter. The ashes which remain are earthy matters, in the form of soluble salts, alkalies, and alkaline earths, &c. The earthy matter may have been taken from the soil, but the vegetable or organic matter cannot have been derived from that source, for the very plain reason, that the soil now contains far more vegetable matter than thirty years before. Hence, the conclusion, to which I have

before arrived, seems irresistible, that vegetables derive most of their sustenance from the air—Hence, to increase the fertility of the soil, we must frequently expose it to the atmosphere, and that in such a manner as to allow the air to permeate as low as the roots of plants are expected to penetrate.

The object of fallowing then is two-fold. First, to turn under and expose to decay whatever is grown upon the surface; and this should be done at the time when the amount of vegetable matter is greatest; and second, to expose to atmospheric action that portion of the soil from which it has for a time been excluded

In answer to the question, how often should land be plowed, I should say, much more frequently than our farmers are in the habit of plowing.—The practice of mowing land from five to seven years, as many farmers do, is a ruinous one. It is in perfect keeping with the policy of the teamster, who drives his team on short feed, till they are reduced to skeletons and utterly incapable to draw any thing but an empty wagon, and then commences nursing and giving them extra feed that he may restore them to their wonted strength and vigor. Far better to *keep* the team in good condition in working order. And so of the land. Let it be mown, at most, two years, and in the fall of the second, or spring of the third, turn under as much grass as can be covered, and there will be no need of twenty cords of manure to the acre to secure a crop of corn and keep the land in heart.

If my position is tenable, namely, that plants derive a large portion of their nutriment from the atmosphere, worn-out lands may be reclaimed by *plowing*. I think it will be found generally, that in lands exhausted by continuous *skinning*, there is a lack of organic, rather than inorganic matter. Or perhaps more correctly, that the deficiency in the former is greater, in proportion as it enters more largely into the composition of plants, than the latter.

Take, for example, an old field, which has been exhausted by continous cropping with rye. It will be found by analysis, that there is a deficiency of potash, lime and phosphorus, also an almost entire destitution of vegetable matter. The earthy or inorganic substances must be supplied by the cultivator. To the vegetable matter the soil will help itself, only give it a chance. Plow thoroughly about the first of June, seed lightly with buckwheat, and harrow in some five bushels of ashes to the acre. Plow again when the buckwheat is in bloom, and sow a little clover seed, say four lbs. to the acre, rolled in gypsum. Let it remain one year, and repeat the last process, increasing the quantity of clover and using phosphate of lime instead of sulphate. In this manner, lands which are all but worthless, may, with comparatively little expense, be rendered productive.

This is not mere theorizing; I give the result of observation. One of the most practical farmers in the state has tested the efficacy of this process on various soils and with most satisfactory results.

Thousands of acres, in this commonwealth, not now yielding enough to pay for fencing, might by this simple process and trifling outlay, in the course of five years, be restored to their original fertility. [N. E. Farmer.

One to-day is worth two to-morrows.

Sowing Grass Seed.

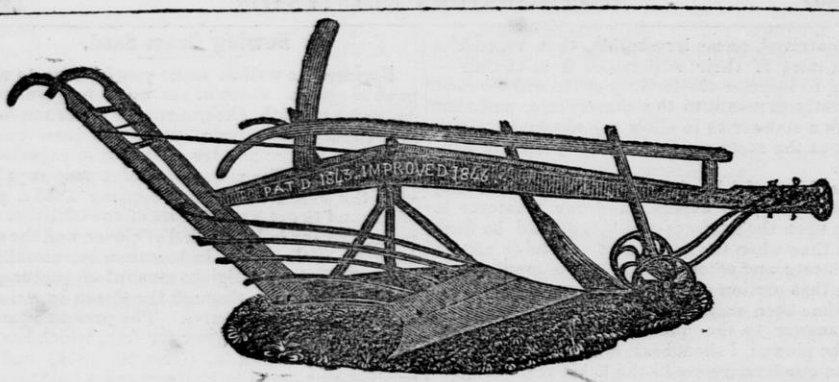
Farmers, as well as other people, like to make good bargains. Some of the worst bargains they do make is with themselves For example—to save twenty-five cents of seed, they loose twenty dollars of hay or pasture. By way of experiment, and to exhibit the advantages of a good supply of seed, the writer sowed in the spring 1850 a piece of ground to grass, at the rate of one bushel of seed to the acre, or half a bushel of clover, and the same quantity of timothy. In less than two months the field afforded a prodigious amount of pasturage—full twice as much through the season by estimate, as ordinary good pastures. The present year, the grass was allowed to grow for hay, which has just been cut and drawn in, (7 mo. 10, 1851,) and the product was found to be three and a half tons per acre. Where can we find a permanent pasture or meadow that will do this? The soil was of ordinary fertility only, or would not probably have yielded more than 26 bushels of corn per acre.—The amount of pasturage afforded by the second growth of this grass field, fully warranted the belief that a ton and a half per acre, might have again been cut, making five tons of hay to the acre in all, for one year.

This hay produced where plenty of grass seed is sown, is of much better quality than where the stalks stand thin on the ground.

[Albany Cult.

The Mile of Different Nations.

	English yards.
Arabian mile,	2,148
Bohemian mile,	10,137
Brabant mile,	6,082
Burgundy mile,	6,183
Chineselis,	629
Danish mile,	8,244
English mile,	1,760
English mile, Geographical,	2,025
Flemish mile,	6,869
French artificial leagues,	4,860
French Marine leagues,	6,075
French legal leagues of 2,000 toises,	4,263
German mile, Geographical,	8,100
German mile, long,	10,126
German mile, short,	6,859
Hamburg mile,	8,244
Hanover mile,	11,559
Hesse mile,	10,547
Dutch mile,	6,395
Hungarian mile,	9,113
Irish mile,	3,038
Italian mile,	2,025
Lithunian mile,	9,781
Oldenburg mile,	10,820
Poland mile, short,	6,075
Poland mile, long,	8,101
Portuguese legoas,	6,760
Prussian mile,	8,468
Roman mile, ancient,	1,612
Roman mile, modern,	2,025
Russian versts,	1,167
Saxon mile,	9,905
Scotch mile,	1,984
Silesian mile,	7,083
Spanish leguas, common,	7,416
Spanish leguas, legal,	4,630
Suabian mile,	10,126
Swedish mile,	11,703
Swiss mile,	9,150
Turkey berries,	1,821
Westphalian mile,	12,155



Self-Holding Breaking Plow.

This engraving is a representation of a plow for breaking prairie with a heavy team of several yokes of oxen. It is self-ho'ding—made so by means of the axle, wheels and lever. The axle is adjusted to its relative position with the line of the landside by rods jointed to the end of the beam. The rear ends of the rods pass through the axle near the wheels, and are held to their exact position by screws.

The axle is attached to the lever by posts passing each side of the beam; and the lever is kept in its appropriate place by a pin, or spring catch.—By a movement of the lever, the plow is thrown out of the ground while turning the team, and by a reversed movement is let into the ground, taking a furrow slice of any desired depth.

This self-holding arrangement saves the time and expense of one hand in breaking. The driver being sufficient to manage the team and plow. It will be observed that the furrow is turned by means of rods, which makes the draft light by lessening the friction. The share or cutting edge is held firm in a clamp or vice, making it convenient to remove for sharpening. Two shares are usually sold with a plow. In some sections of the country these plows are extensively used, and are tho't to be the best breaking plow in use, for heavy teams.

NEW VARIETY OF POTATO.—A bulb of the potato species, which was found growing indigenously in Mexico, was brought to this country some years since, by a gentleman who returned from that country after the war. Several specimens were given to Mr. Andrew Hale, of Alloway, Wayne county, who planted them, and after four years cultivation, has produced a crop that equals in appearance the best approved potatoes. It is of small size, long and not large, resembling the "white Mercer," pretty closely—with smooth skin, light complexion, and without the deep indention called "eyes," by which great loss is suffered in many kinds. [Rochester Dem.

Green Paint.

A majority of your readers are more or less interested in the use of green paint. I will therefore give you the component parts, as manufactured by some large establishments in our principal cities, and sold as *genuine.*—To be sure, when first applied, it is a beautiful green, but soon fades, and whitens out, as might be expected, when you are informed that one of the principal ingredients is lime.

To make Paris Green.

The body is	Arsenic.
To color, use	Blue Vitriol.
To set,	Baromit.

To make Verdigris Paint.

For a body	Good Thomaston Lime.
To color	Blue Vitriol and Baromit.
To set	Alum and a little salt.

Put up in tin cans, and marked.

☞ "Pure Verdigris Paint." ☜

This costs per pound to manufacture, about 12 cents, and retails at about 40 cents.

To make a green paint, "that is paint," pulverize Verdigris. First prime with a lead color; then two or three coats of Verdigris and Linseed Oil. This will last an age. To freshen the color once in eight or ten years, ayply a thin coat of linseed oil.

A durable and cheap paint for barns and out-buildings, is an

Invisible Green.

To 5 measures of French Yellow, mix 1 measure of lampblack, with linseed oil applied raw, *without boiling*, or any spirits of turpentine, which the painters will object to, especially if they work "by the job." Oil used in a raw state dries slow, but will wear much longer; and the spirits of turpentine is used to make the paint spread easy, and to dry quick. But it kills the life of the paint, in proportion to the quantity used; as may be observed by examining the knots in a pine board—the pitch kill or eats up the paint.

One measure of Venetian Red added to the above invisible green, makes a very handsome paint for out-buildings, and we think the colors look none the worse as they fade.

[Cor. N. E. Farmer.

SALT FOR CATTLE.—I have for many years been perfectiy convinced that salt allowed in quantity is highly prejudicial to all breeding animals, as it has a direct influence in greatly diminishing the necessary supply of milk for the immediate sustenance of the young animal; hence salt is the best medicine to 'dry' a cow of her milk, and ewes would also be benefitted by free access to this substance for one week when the lambs are taken from them. I am also convinced that salt has the effect of diminishing the secretion of the liver, and that it is from this cause that the good effects of salt are so obvious in the feeding of animals. It is well known that incipient diseases of the liver, is favorable to the production of fat.—When lambing ewes are allowed a large quantity of turnips, with a small amount of other food through the winter, abortion is a frequent occurrence; their supply of milk is very deficient, and their lambs are dropped of various sizes and far from healthy. If the ewes are allowed free access to salt, the lambs are still more unhealthy, and many die of indigestion and disease of the liver. The mortality of the lambs, in these cases, may, I think, be fairly attributed to the amount of salt taken by the dam; for admitting that a small portion only is directly given them, the quantity positively taken in their food in turnips, is some what considerable. This is a point—the normal or natural quantity of salt contained in the different roots, &c., consumed by animals as food—which will throw much light upon this most important branch of agriculture.

"That the use of salt is highly beneficial at certain times there cannot be a doubt; but from my own knowledge, it is no less equally true that the too free and indiscriminate use of it to all stock and at all times, is highly prejudicial." Professor Robinson.

THE BENEFIT OF RAILROADS TO FARMERS.—The New York and Erie Railroad brought down in one day, not long since, 180,000 lbs. of butter. The amount of produce brought to the tide water by this road, is almost incredible, and would be still larger if the capacity of the road was greater. A Broome county farmer told us in December that he had been more than two weeks trying to send forward some produce, which he was unable to do, because the cars were so full before they reached Binghamton, there was room for nothing more. Since the opening of the road, the consumers of farm produce in all the villages, are grumbling at high prices. What is their loss, is the farmer's gain. Every farmer along a line of railroad, ought to be a stockholder. They would then look to *our* road, and try to promote its interests, and thereby their own.

Chickens are now sent from Northern Ohio alive, to the New York market, where they sell from 39 to 50 cents apiece. We have known them a drug in the Ohio market at 50 cents a dozen. This is only the beginning of the advantage to the country, growing out of the completion of the Erie Railroad. [Plow.

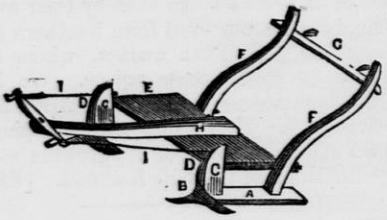
We cannot tell why it is that man must plow, sow, and reap grain, and why he must slay the ox for his food, when the same substances of which his body is composed, can be dug from the dust beneath his feet; we only know that such is the fact. The grain of wheat requires sunshine, moisture, and the blanket of mother earth, to make it germinate, grow up, and come forth again in the golden harvest to gladden the heart of man. These operations of nature to produce certain results we are acquainted with, and have learned the facts by observation. All the knowledge of the farmer must be obtained by experience and careful observation. His business is a practical one; not that of a dreamer or speculator; his eye must be open to see and his hands always ready to do—never afraid to try an experiment, and never too hasty to adopt a theory without experiment. Experiment alone can determine the value of fertilizers, and the best mode of farming—such as the best modes of applying fertilizers—the times, soil, and seasons most suitable to do so. It is our opinion that every farmer should have a few acres of his farm set off for model experimental agriculture.

☞ How many young men waste in useless indulgence and extravagances, enough in three years to pay for a lot of land, for a homestead in which they could plant trees and flowers, and make attractive with its varied beauty, and on which, after a few years of prudent saving, they could erect a neat dwelling for a home? We like the teachings of this boy's example, and if there is one thought of worldly wisdom above others which we would plant in the mind of every American, it is this—secure the title of a piece of land and make it a home, and make that home beautiful and attractive in all its externals and in its internals make it the nearest possible, a representation of heaven.

[Bangor Whig.

A Double Furrower.

I send you the plan of a Double Furrower, which we have used five years. We find it very handy. It furrows twice as much as the old fashioned way. It can be set two, three, or four feet apart.



Explanation of the cut.

A. The shoe made of plank, 2 inches thick.

B. B. Shares ; same as those on a double mould board plow, bolted on the shoe.

C. C. These pieces are made of 2 inch plank, and morticed in the shoe.

D. D. These rods are made with heads on one end, and nuts on the other. They pass through the stanchion, C. C., through the plank, E., and the upright part, F., which forms a hinge ; the holes are a little larger than the rods, and work freely.

G. Crosspiece, on which are two handles ; it is bolted loosely on the uprights, and works same as plank, E.

H. Beam bolted firmly on the plank, E.

I. Rod to stiffen the beam.

The plank, uprights and crosspiece, are 1½ inch stuff.

It is necessary to have a wheel on the beam, the same as on a plow. [Cultivator.

THE PIG.—Few animals yield less waste matter, after being dressed for market, than the pig ; every part is useful, as a sailor would say, from stem to stern ; the head for baking, the tail for roasting. Every part is made palatable and useful—feet, minister's face and shanks, are all admired, when properly "soused" and cooked. The rich and poor alike admire a meal from the pluck and portions of the loin ; the intestines make excellent envelopes for sausage meat ; the blood makes a savory pudding, and the bristles a brush for purposes "too numerous to mention." The pig is a short lived but useful animal ; and "works his own passage" through life by mixing muck and making manure for his owner. At death he invariably goes squealing out of his pen into "lard, and pork, and bacon," and is soon off on a voyage at sea in pursuit of a whale.

We never liked the long-legged, slab-sided, apron-eared grunters, except for the race course, for the reason that they eat too much food to keep them in decent working order.—They might do for a "show" occasionally as fine specimens of a living skeleton, but for porkers give us the short-legged, small-headed, quiet, and contented pig, round as an apple and heart as a buck, with sufficient good sense to know when he has eat enough and where to go and lay down to be rubbed or curried ; and, withal, as Uncle Zim used to say, a "*hog*, with a remarkably *good disposition*."

[Vermont Watchman.

SLAUGHTERING CATTLE.—The mode of killing cattle in this country by knocking them down with an axe is not universal. Mr. Stephen describes the French method which will be seen to differ considerably.

Cattle are slaughtered in a different mode in different countries. In the great *abattoirs* at Montmartre, at Paris, they are killed by breaking the spinal chord of the cervical vertebræ, which is accomplished by driving a sharp-pointed chisel between the second and third vertebræ with a smart stroke of the mallet, while the animal is standing ; when it drops down on the floor, and death or insensibility ensues, and the blood is let out by opening the blood vessels of the neck. This is also the mode of slaughtering in Germany.

In this country the plan is first to bring the ox down on his knees, and place his under jaw upon the floor by means of ropes fastened to his head and passed through an iron ring in the floor. He is then stunned by blows from the sharp-pointed back of an iron axe, made for the purpose, on the forehead, the bone of which is usually driven into the brain. The animal falls on one side, and blood is let out by the neck.—Of the two modes, the French is apparently less cruel, for some oxen require many blows to make them fall ; I once saw an ox receive nine blows before it fell. I have heard it alleged by butchers of this country that separation of the spinal chord, producing a general nervous convulsion throughout the body prevents the blood flowing so rapidly and entirely out of it as when the ox is stunned by a blow on the forehead.

MODE OF PRESERVING SHINGLES ON ROOFS.—A gentleman in Groton gave us the other day the manner in which he prepared his shingles, before laying them on his house, some six years ago ; and on examination, we found they had a perfectly sound and fresh appearance, as though they had been laid not more than a month.

He had a large boiler, which he filled with

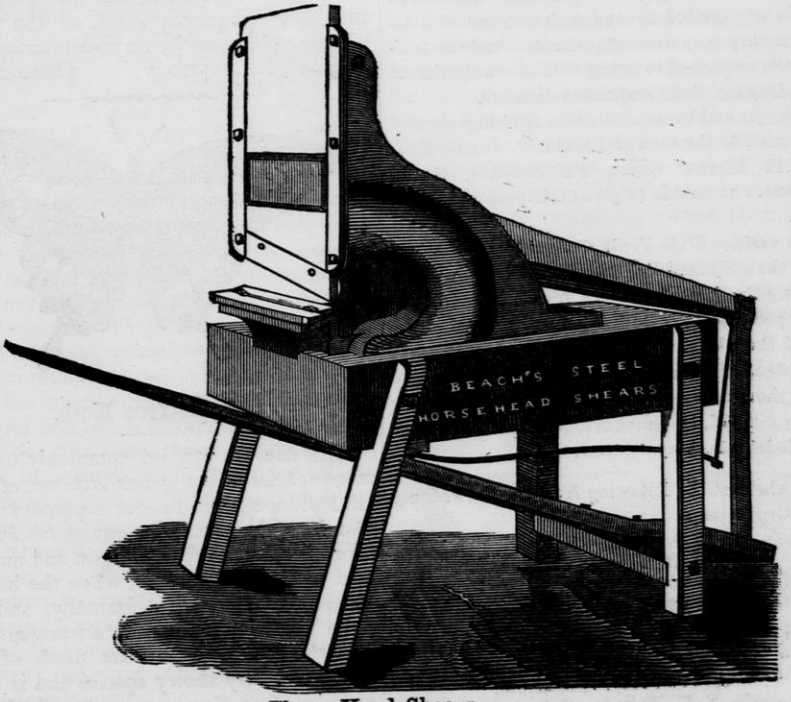
whitewash, mixing with it, about one pound of potash to four gallons of liquid, also about that amount of salt. This composition he boiled, and while it was boiling, he dipped the shingles in, taking a handful at a time, and holding them by the tips. He had boards placed so that he could set his shingles on them on end, and let the liquid, as it ran off them, run back again into the boiler. The shingles he allowed to dry in this position, before laying them, and his belief was, that by thus curing or hardening them, they would last much longer. They could be colored red or yellow, easily, by mixing red or yellow ochre with the composition.

The expense for shingles on a roof, is very considerable, as the most of those which we buy now, unless we go to a very high price in purchasing, last but a few years, and therefore something that will harden or preserve them like the above, and which costs but little in the application, will be thankfully received by owners of buildings.

[Spindle City.

Sloth, like rust, consumes faster than labor wears, while the used key is always bright.

Dost thou love life? Then do not squander time, for that is the stuff life is made of.



Horse Head Shears.

These shears are used for cutting bars, rods, and burrs, plate iron and steel—any thickness up to 3-8 inch cold, and when hot 3-4 inch. In plow making, it is indispensable, and for miscellaneous purposes in a custom shop it is found so useful that after being used the mechanic does not like to be without one. They are very strong—worked by one man and with great rapidity, and with-al occupy but little room. These shears can be procured at the plow factory of J. M. May, Janesville.

☞ Country boys who "go to sea," generally get what they go for, especially if you spell sea with two e's. They go to see the difference between a comfortable home and the damp mustiness of a forecastle—between warm feather beds and wet, ill-conditioned "bunks"—between mince pies and chicken fixings, and pickled side leather—between the friendly greetings of neighbors, and the "d—n your eyes" of a bull-headed mate—between the dry clothes with which mothers ever welcome you from the peltings of a pitiless storm, and the wet sails into which a brutal captain tells you to bundle on or he'll "break your bloody head for you." Whether such seeing, however, is worth what it costs, is at least doubtful. As an admirer of dry breeches, we should think it wasn't.

HORTICULTURE.

American Pomological Congress.

In compliance with a resolution passed by the American Pomological Congress, during its session at Cincinnati in October, 1850, it becomes my duty publicly to announce that the next session will be held in the city of Philadelphia, on Monday, the 13th day of September, 1852. The congress will assemble at 10 o'clock, A.M., in the Chinese Museum Building, South Ninth street, below Chestnut.

The Pomological, Horticultural and Agricultural Societies throughout the United States and Canada, are invited to send such number of delegates as they may deem expedient. And the delegates are requested to bring with them specimens of the fruits of their respective districts.

Packages and boxes of fruit for the congress may be directed to the care of Thomas P. James, Esq., No. 212 Market street, Philadelphia, should the owners be unable to give their personal attendance.

The various State Fruit Committees, enumerated in the subjoined list on the next page, will, on or before the day of meeting, transmit their several reports to A. J. Downing, Esq., general chairman of the whole. The chairman of each state committee is authorized, where vacancies occur, to fill up the number of his committee to five members. W. D. Brinckle, M. D., President.

Philadelphia, May 1, 1852.

We abstract the following from the list of State Fruit Committees:

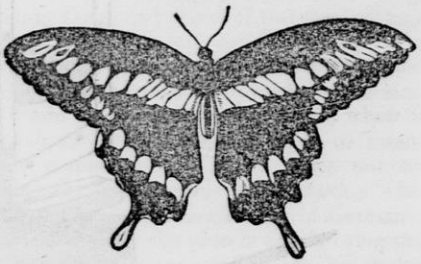
Illinois, Dr. J. A. Kennicott, Northfield.
" Prof. J. B Turner, Jacksonville.
" C. Francis.
" Edson Harkness.
" C. R. Overman.
Michigan, J. C. Holmes, Detroit.
" W. H. Scott, Adrian.
" A. T. Prouty, Kalamazoo.
Wisconsin, F. K. Phœnix, Delevan.
Iowa, Henry Avery, Burlington.

The Weeping Willow.

There is no tree, the sight of which excites more tender emotions in the heart, than the "*weeping willow.*" It is out of place in a public walk—but looks delightful when flourishing in luxuriant beauty on the borders of some winding stream, or in some secluded spot, which has long been the asylum of solitude and tranquillity. It is the emblem of sorrow and devotion, and forms a beautiful and appropriate ornament to a burying ground. With its drooping foliage, it appears to be looking back on the past—and sympathising with the afflicted mourners. It reminds one of the things which were—and hushes all the angry passions of the human heart.

Independent of the associations which are inseparably connected with its appearance, there is no tree in our forests which presents an aspect more graceful and lovely, or whose branches are more umbrageous. The first weeping willow was planted in England by the celebrated poet, Alexander Pope. He received from the Levant a basket of figs, and observed one of the twigs, of which the basket was formed, putting out a shoot. This twig he planted in his garden. It flourished.

Grew sweet to sense, and lovely to the eye, and from this parent stock, all the weeping willows, which are by no means uncommon in England, have sprung. [Boston Jour.



Apple-Tree Moth.

This name is applied commonly to one or more species of the genus *Attacus*, of nocturnal lepidopeterous insects separated by Germar from the great Linnæan genus *Phalaena*, comprising some of the largest and most beautiful moths. The wings, when the insects are at rest are extended horizontally, and are in some species adorned with a transparent spot near the center. The atlas moth of China, which is a very showy species and is conspicuous in some European entomological cabinets, is scarcely superior to some of our species. Their cocoons are said to be employed in the East Indies in the manufacture of silk. A specimen taken the past week (in Hudson) measures in the expansion of wings 5 inches and 2 lines; the cocoon was not obtained, but we have often seen them, their texture is firm, the fibres however are rather coarse.

[Fam. Visitor.

Vegetable Serpent.—According to some Italian journals a new organized being has been discovered in the interior of Africa, which seems to form an immediate link between vegetable and animal life. This singular production of nature has the shape of a spotted ser-

pent. It drags itself along on the ground, instead of a head, has a flower, shaped like a bell, which contains a viscious liquid. Flies, and other insects attracted by the smell of the juice enter into the flower, where they are caught by the adhesive matter. The flower then closes and remains shut until the prisoners are bruised and transformed into chyle.—The indigestible portions, such as the head and wings, are thrown out by two aspiral openings. The vegetable serpent has a skin resembling leaves, a white and soft flesh and instead of a bony skeleton a cartilaginous frame filled with yellow marrow. The natives consider it a delicious food.

REMARKABLE GROWTH OF A PEACH TREE.—Mr. C. P. Powers, of Abington, Mass., informs us that he has a peach tree, on his place, which he budded in the summer of 1850, and in 1851, its whole growth, including stalk and branches, was fifty feet two inches, and now it is thickly set with blossom buds for 1852.

FARMING INCONSISTENCES.—Farmers dig their gardens two feet deep, but only plow their land five inches. They take especial care of their nag horses, in a good warm stable, but expose their farm horses and cattle to all weathers. They deny the utility of drainage in strong tenacious clays, but dare not dig an under ground cellar in such soils, because the water would get in. They waste their liquid manure, but buy guano from Peru to repair the loss ; and some practical men, who are in estacies with the urine of the sheepfold, have been known seriously to doubt the benefit of liquid manure. But it may be asked, "where is the capital to come from for all these improvements?" The reply will be, "where does the capital come from to make railways and docks, to build steam vessels, to erect a whole town of new squares and streets, and to carry out every other useful and profitable undertaking?" [Ex. paper.

Agriculture in Palestine.

Dr. J. V. C. Smith of Boston, who has recently returned from a visit to Palestine, in remarking upon the objects of interest which came under his observation in that hallowed land remarks:

"The horses were mostly of a dapple grey color. Had no barns—no hay—their caravansaries were rather like barn yards ; he had slept in them—horses were generally fed on chopped straw and beans ; about two quarts of the latter to a feed—the straw was used for the purpose of distention, while the beans was a highly concentrated nutrition, which alone, would so contract the bowels of the animal as to produce disease—hence the great value of a combination of the straw with the beans.

He thought the same principle of feeding might be practised in this country, and that successfully, both in a physiological and pecuniary view.

"The land was cultivated here under a very great disadvantage—using the same plows and other instruments now, that were used two thousand years ago. Here they saw a great tomb cut out of solid stone ; on either side of the spacious entrance niches were cut in, and the whole workmanship within evinced great skill and experience. This tomb was built 4000 years ago. Herodotus visited it two thousand years ago, and speaks of it as having been then two thousand years old. In its finished walls were wrought a splendid figure of a young girl dancing ; also the plow was there, a fac simile of the plow used by the inhabitants now. This people are very tenacious in their habits. They are very remarkable at horsemanship—train their horses to perform wonders—ride with great speed over rocky crags, and among rolling pebbles. It would, in his opinion, be a hopeless task for an army of 100,000 men to conquer 500 of the meandering horsemen."

[From the Journal of the New York State Ag. Society.]

PRESERVING FRUITS IN THEIR OWN JUICE.—Your committee were much interested in the ripe fruits preserved in their own juice, without sugar or cooking, by placing them in a bottle and expelling the air, in part, and carbonizing the remainder, by the action of heat applied to the bottle. Thirteen bottles of the fruits so preserved were exhibited to us by William R. Smith, of Macedon, Wayne county. viz: 5 of cherries, 2 of peaches, 1 of strawberries, 3 of as many varieties of currants, 1 of blackberries, 1 of plums. Those bottles which your committee examined were found of fine flavor, and we deem the art of so preserving fruit of much value, but requiring so much nicety and care in the manner of doing it, as to be slow in coming into general use. This fruit, we presume, when carefully preserved, will keep as long as may be desired.

The following is given us by Mr. Smith as his manner of preserving these fruits:

They are preserved by placing the bottles, filled with the fruit, in cold water, and raising the temperature to a boiling point as quickly as possible ; then corking and sealing them immediately. Some varieties of fruit will not fill the bottle with their own juice ; these must be filled with boiling water.

S. MILLER, Ch'n.

The White Native Grape.

You ask for some information relative to a white native grape, cultivated by me. I will give you as briefly as I can, the history of it.

The banks of the Pawtuckaway (a small branch of the Lamphrey river,) abound with wild grape; so that in the space of two miles you may meet with twenty different kinds, all of which have originated from seeds, and from one of which this vine originated. The old vine appears to be sixty or seventy years old; it stands in a cold, rocky, uncultivated spot, and climbs some large maples, flourishing without cultivation. I have known it for eighteen years, and never but what it has borne some every year. The fruit is from one third to double the size of the Isabella with us; it is rather of a drab color, but when very white of a reddish cast, quite sweet, and with a very white aroma. I have never known it mildew, which most of the white varieties are apt to do. The fruit is much larger on the cultivated than on the old stock, but it does not get its full flavor till the vines have borne two or three years, or till the roots get strong. It is perfectly hardy in our climate, and usually stops growing about the first of September. The fruit ripens about the middle of the month in common seasons, and will keep for some time. It is a good bearer: a neighbor has a vine about ten years old, (a layer from the old vine,) which for the last two years has borne more than three bushels each year of very fine fruit. When planted on the south side of a building, it frequently ripens a week earlier. They are now scattered through the whole of New England, and one lot in New York. About two years ago I planted some small vines on a high, dry knoll in the open field to test their growing on high, dry ground, and I have never seen any grow better. Wherever I have sent the fruit as a specimen, it has invariably given perfect satisfaction, and should it prove adapted to the wants of the people, I shall feel myself richly rewarded for my trouble.

D. L. HARVEY.

Epping, N. H.

We have been hoping for some time to find a native white grape that should vie with the Isabella or Catawba, but all that we have yet met with have been so strongly impregnated with the fox flavor as to entirely unfit them for table fruit. We hope the above is an exception; and, as we never like to "give up the ship" will endeavor to give it a fair trial.

[Plow, Loom and Anvil.

Currants and Gooseberries.

It is to be presumed that not one in a hundred understands the simple process of cultivating either currants or gooseberries, although it has been detailed in all the horticultural books with which the world abounds. Thousands of persons, with every appliance for success, are still content to live without a plentiful supply of these delicious, healthy, and cheap luxuries, merely because they have not tho't of the matter. They have a few stinted bushes set in the grass, with three-fourths of the stocks dead, and then wonder why they do not bear in abundance.

There is not a more beautiful shrub growing than the currant, properly propagated; and the same may be said of the gooseberry. Cultivators who pay any attention to the subject, never allow the root to make but one stock, or, as the English say, "Make them stand on one leg"—thus forming a beautiful miniature tree.

To do this, you must take sprouts of last year's growth, and cut out all the eyes, or buds in the wood, leaving only two or three at the top; then push them about half the length of the cutting, into mellow ground, where they will root, and run up a single stock, forming a beautiful symmetrical head. If you wish it higher, cut the eyes out again the second year. I have one six feet high. This places your fruit out of the way of hens, and prevents the gooseberry from mildewing which often happens when the fruit lies on or near the ground, and is shaded by a superabundance of leaves and sprouts. It changes an unsightly bush, which cumbers and disfigures your garden, into an ornamental dwarf tree. The fruit is larger, and ripens better, and will last on the bushes, by growing in perfection, until late in the fall.

The mass of people suppose that the roots make out from the lower buds. It is not so—they start from between the bark and wood, at the place where it is cut from the parent root.

[Vermont Chron.

The Orchard.

Plant among your trees; *plant among your trees;* then after you have taken off your corn and other crops, you can look back upon your shorn field and see that in addition to the produce secured, you have the growth on your three or four acres of trees. In a few years you will begin to take more from the trees than you do from the land. They will grow fast and bear generously, if the land is all kept mellow for the roots and sufficient

nutriment is spread broadcast for the roots to feed upon.

Now take the level place, where you have your young orchard, and go carefully to work with a steady team—don't hitch on the steers for this job—plow the land deep and well, manure it, broadcast liberally, work the manure down into the soil with a small plow or large cultivator, plant, hoe till, and your trees will grow like the corn itself. You will caution the boys in dropping the corn not to plant a kernel within six or eight feet of the trees. They need sun and air, and grow better when nothing else grows very near to them.

Just read what the late Mr. Cole says in the "American Fruit Book":

"Mr. Moses Jones, of Brookline, in this vicinity, a most skillful cultivator, set 112 apple trees, two rods apart, and peach trees between, both ways. The eighth year he had 228 barrels of apples, and in a few years from setting the trees, $400 worth of peaches in one year; and the best of the story is, that large crops of vegetables were raised on the same land, nearly paying for the manure and labor. The tenth year from setting, many of the apple trees produced four or five barrels of apples each, the land still yielding good crops of vegetables." [Exchange.

SHADED FLOWERS LAST LONGEST.—The Gardeners' Journal, an English periodical quoted by Hovey in his last magazine, recommends shading flowers while blooming, in order to continue them in blossom a much longer time. Speaking of an exhibition of American flowers in Regent's Park, London the writer says:

"The practice of shading plants from the direct rays of the sun, receives an illustration on a broad scale, in this exhibition. The result of which is that the plants, which in the open air exposed to the sun, would last in perfection two or three days only, continue here, shut out as they are from the sun, and exposed to a damp, cool, and still atmosphere, no less than a month, and some of them still longer. This, then, is the result of shading plants while in flower. * * * In all cases where it is possible, the shading ought to be moveable, so as to be taken down at pleasure."

The above hint may be of service to those who love the culture of flowers. If shading in the cloudy and damp climate of England, be of service in prolonging the blooming season of flowers, it must be much more so in the bright and sunny region which we inhabit.

The sleeping fox catches no poultry.

For the Wisconsin & Iowa Farmer.

MR. EDITOR—While perusing your valuable paper from time to time, I have deduced many items of important information from its instructive columns, relative to agriculture and horticulture. And judging of its merits from having some experience in both pursuits, I have arrived at the conclusion that it is exactly such a paper as is needed by the farming community.

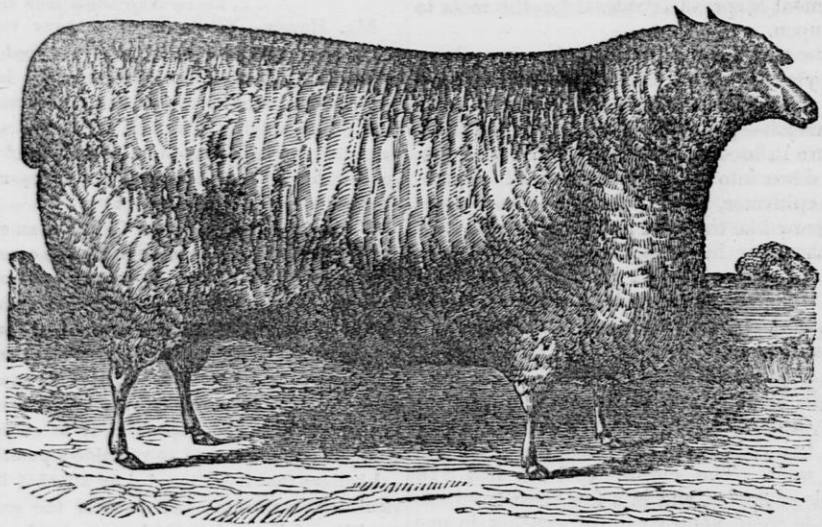
We have in this portion of the union an exceedingly fertile soil, and in most parts it is considered inexhaustable in quantity. Being well aware of the importance of placing something of a reliable nature before the public as a basis of information, from which agricultural and horticultural improvements may be made with safety and success, I deem it a duty devolving upon every experienced farmer and friend of improvement to extend his aid in the circulation of so valuable a publication.

I believe that it is conceded by all, that the agriculturist is the bone and sinew of the commonwealth; and if so, what good reason is there, that the inhabitants of this country should not vie with those of European nations, in quality and quantity of agricultural products. Perhaps it may be argued by some that the vast amount of arable and fertile land in this country, together with its cheapness and easy access, will warrant general and universal succes in the producing of most kinds of vegetation, with but partial tilling. But, by most persons, that opinion would be considered very erroneous. It is true that the improved lands of this country are capable of sustaining a much more dense population than the present, with no improved modes of cultivation. But the time is rapidly hastening when the increase of population in this country will demand all the produce which its resources can furnish; in view of which, connected with our present interest as a people, as well as individual, it behooves us to adopt that mode of husbandry which will furnish the greatest quantity and best quality of produce from the smallest area of surface. Many are undoubtedly well aware that much exertion is being made by many noble-minded agricultural economists, for the purpose of modifying the present barbarous system of husbandry, and rendering more lucrative the employment. Hence the county, and town, as well as the state fairs. All the efforts which are being made, are strictly designed to enhance the value of agricultural pursuits; to promote domestic economy, and meliorate the condition of our beloved country.

In conclusion I would add, that I am happy in the assurance that a paper devoted to agricultural improvements, and so worthy of public patronage, as the Wisconsin Farmer, is extant.

W. S.

Harmony, Wis., May 13, 1852.



Leicestershire Sheep.

For the Wisconsin & Iowa Farmer.

Mr. Editor—With your permission I will say a few words through the columns of your paper to my brother farmers about sheep raising and my mode of doing the same which is probably new to some, at least.

I sold last winter 28 of my Leicestershire sheep, half bloods, crossed with good common ewes, from one to three years old, for $134 in the Milwaukee market, for butchering These were all weathers but four. I have found the Leicestershire sheep to be tough and hardy.

We plant from 80 to 100 acres of corn every season and after wheat harvest we turn the sheep into the corn field, where we let them remain until the setting in of winter—they then run to the straw stacks till spring. During the winter we feed corn at the rate of two bushels to one hundred sheep daily, every evening and morning. The best profit we get is, they clean every weed from the corn field. The corn ears set so high that they get but little corn, and are fat the year round. Our lambs are raised without trouble. They yield soft long wool per head from 5 to 8 lbs., which sold last season for 31 cents.

A. K. Barrett.

Magnolia, April 25, 1852.

The Leicestershire sheep are the largest class in this country; long wooled, shear from 5 to 12 lbs. of wool, according to the sex, and fat readily.—They are said to make an excellent cross on the common sheep of the country, both for wool and mutton.—*Ed. Farmer.*

It is hard for an empty bag to stand upright.

Usefulness of Potatoes.

We know not the author of the following remarks for we found them copied into an old almanac which gave no credit for them, but they are so sensible, and so truthful withal, that we think them worthy the attentive perusal of our readers. Of the multitudes daily accustomed to the use of this valuable root, how few ever know or consider the many excellencies it combines, and its peculiar adaptation to the nourishment and sustenance of both man and beast:

"The potato is a vegetable which the rich man knows not how to forego, and one which places the poor man above want. With a shelter from the weather and one acre of land to plant with the tuber, a man may subsist at almost any distance from the miller, the baker, the butcher; and I may almost add the doctor. It suits all tastes, and flourishes in nearly all climates, and is eminently nutritious and healthful. Its cultivation demands but little labor, and when the earth has ripened the tubers, they are harvested without trouble, and cooked without expense. A few fagots, in summer, will boil them, and, in winter, the necessary heat is supplied without expense. There is no waste of time in the process of milling, sifting, kneading, baking, seasoning, jointing or carving. There is nothing deficient nor superfluous in a well boiled potato. As soon as it is cooked, it opens by chinks, lets fall its thin pellicle on the platter, and with a little salt, butter or milk, is ready for the unfastidious appetite of the hungry man. Start not back at the idea of subsisting upon the potato alone, ye who think it is necessary to load your tables with all the dainty viands of

the market; with fish, flesh, and fowl, seasoned with oils and spices, and eaten perhaps, with wines —start not back, I say, with feigned disgust, until you are able to display in your own pampered person a firmer muscle, a more beau-ideal outline, and healthier glow than the potato-fed peasantry of Ireland and Scotland once showed you, as you passed their cabin doors! No; the chemical physiologist will tell you that the well-ripened potato, when properly cooked, contains every element that man requires for nutrition, and in the best proportion which they are found in any plant whatever. There is the abounding supply of starch for enabling him to maintain the process of breathing, and for generating the necessary warmth of body; there is the nitrogen for contributing to the growth and renovation of organs; the lime and the phosphorus for the bones, and all the salts which a healthy circulation demands. In fine, the potato may well be the universal plant —and the disease under which it now labors is a universal calamity. If any agricultura institution should ever be so fortunate as to make us acquainted with the means of controlling it, its name would quickly rank by the side of the proudest universities, and if the great discovery should proceed from a single individual, his name would live when those of the greatest generals and conquerors have become as uncouth and strange to human utterance as their deeds were opposed to human happiness."

RAISING GEESE.—A goose is more easily raised than any other domestic bird of our experience. Here is the simple course we pursue: Feed the geese kept for breeders, moderately well all winter with a mixture of grain and boiled roots. Provide a warm, dry, well sheltered place for sitting; and when the goose is on the nest, give her regular daily food, principally of cooked vegetables, lest she should get costive; and plenty of fresh clean water. When sitting, a goose does not eat or drink so much as ordinarily. If she inclines to come off the nest, let her do so; and even let her go to the water and swim to her heart's content. She is only taking a necessary ablution; and as to the idea that she will get wet, and chill the eggs on her return, it is all nonsense. Who ever saw moisture adhere to the feathers of a well-fed healthy goose.

After the goslings are hatched, let them run with the goose on grass, but be careful that they are not exposed to wet, the first week of their existence; after that, there is little danger, unless the rain be particularly cold and enduring. With a small allowance of boiled vegetables, mush, or oats, the flock will do well the first fortnight; after that they will subsist almost entirely on grass and in the water. In the fall, feed well with boiled vegetables and grain, and they will soon be sufficiently fattened for the market.

[American Agriculturist.

CHANGE OF GRAFTED FRUIT.—Some time ago we published a letter from Mr. Jacob B. Farmer, of Concord, in this state, in relation to a change in grafted fruit, which he described. Dr. Holmes editor of the Maine Farmer, and, by the way, one of the best agricultural papers in the country, has noticed Mr. Farmer's statement, and makes the following remarks in relation to a similar occurrence:

[N. E. Farmer.

"Does the original stock or tree into which a graft is put ever overcome the graft? We believe there are well authenticated instances of the kind which Mr. Thomas C. Wood, of Winthrop, related to us as having taken place in his orchard. A graft had borne for several years the true fruit of the graft. The fruit, however, began to change, and in a few years the graft bore an apple nearly or quite resembling that which the tree bore before being engrafted. Mr. W. attributed the change to the wood of the stock somehow gaining the ascendency over the graft. Some of our cotemporaries pronounced the whole a "fish story," or at any rate a mistake.

☞ Apple trees that have been girdled by field-mice during the winter may be preserved, by taking a suitable circle or section of bark, in the spring, from the limb of another apple-tree, and adapting it carefully to the wounded bark, the edges of which are to be pared to an even line, and the whole bound up and covered with grafting clay. It is not absolutely necessary that the bark introduced should encompass the whole trunk; as the union by a single portion will preserve the life of the tree, and the remainder of the wound will gradually become covered with new bark. [A. J. D.

PROFITS OF SHEEP AND WOOL GROWING.—Having read articles concerning the profits of farming, I venture the income of a flock of 24 sheep kept by one of my neighbors the past year, which was the round sum of $74,-25, besides 6 lambs that died. He sold his wool at 38 cents per pound, and his lambs at $2,00 each, with one exception, that for $1,50. They are of a coarsish grade, but not native. I have bought 19 of the above sheep, at $2,25 per head, and will give the income of them the present year, when I sell my wool and lambs. [Granite Farmer.

RECLAIMED LAND.—John Shipman of Amherst, gives the results of his labors in reclaiming fifty acres of swamp land, in a report made by him to the Amherst Agricultural Society. This land, when commenced upon, more than twenty years since, was a regular peat swamp, and worth comparatively nothing. In 1849, forty acres of it produced 10,000 bushels of potatoes. At various times, eight acres of it have produced 600 bushels of corn; ten acres, 2,500 bushels of potatoes; broom corn at the rate of 600 pounds per acre; and last season, fifteen acres produced more than 1,700 pounds of tobacco per acre. The present worth of the land is $6500—considered a low estimate; net profits, $4831.

Hard Water.

None of the waters produced by nature are entirely pure and soft—artificially distilled water alone is so, and often then, without care and some chemical knowledge of the process, it is not free from impurities.

The waters from primitive formations, particularly from mountainous districts, are almost pure, and springs and wells on sandy plains are nearly—owing to the rocks and soils being wholly composed of silicious and other constituents, insoluble in water. All streams and springs in secondary, or limestone countries, contain more or less materials constituting what are called *hard* water—and often the waters from sudden showers, which have been produced by evaporation from extensive regions of like formation, are sensibly affected.

All waters known as hard, result from some of the acids or their salts being held in solution. The most common are the carbonic acids and their carbonates, and sulphurous and chloric acids and their combinations. All the waters containing carbonic acid gas, and sulphureted hydrogen, (the material that makes the sulphur springs of the country,) uncombined with the earths, are rendered soft by simple boiling, as the gasses are expanded by heat and thrown off, and no deposit is left—but when united with lime, alumina (clay) or the metals, boiling deposits a portion by releasing the solvent, in the form of a hard stony concretion.

The process used by washing-women, to *cleanse* the hard water by adding lye, ashes, or potash, is a strictly correct chemical process. Acids, and alkalies are antagonistical principles; one destroys or neutralizes the other, and renders both inert and harmless.—The sulphuretted waters are more difficult to cleanse, or purify, than any other class except the muriates (acid of common salt, now called chlorates,) as they adhere to their combinations with greater tenacity.

The effects produced on hard water in washing, where soap is used, is very simple when investigated. Soap is a compound of an alkali and animal fat, or vegetable oils and resins, and when added to water containing any acid, or acidulated substance, the acid, by its chemical affinities, seizes and neutralizes the alkali of the soap, disengaging the fatty substance in the same shape it was originally, and in the worst possible shape for cleansing the person or clothing.

There is a vulgar error prevailing among the people generally, that it is dangerous to add lime to wells and cisterns, on account of its rendering the water *hard.* There is no greater fallacy among our traditionary belief. Lime is strictly an alkaline substance, and as such, is a neutralizer of all the acids that water contains, and may be freely used when in a quick or unslacked state—old and airslacked is hurtful, as it has become a sub-carbonate. One ounce of fresh quick lime, dissolved in water, will soften two barrels of ordinary hard water, and render it fit for washing purposes. It is also advantageously used to sweeten cistern water when it becomes stagnant, and of bad odor, and the cheapest and most ready deodorizer of all unpleasant, unhealthy effluvia. [Rural New Yorker.

DRAINING IN INDIANA.—Gov. Wright, in his address before the Wayne County Agricultural Society, estimates the amount of marshy lands in Indiana at three millions acres. These were generally avoided by early settlers as being comparatively worthless, but when drained they become eminently fertile. He says, "I know a farm of 160 acres that was sold five years ago for $500, that by an expenditure of less than $200, in draining and ditching, the present owner refuses now $3,000." Again he says, "I have a neighbor who informed me that in 1850, a very dry season, he had ditched a field that he previously put in corn; in the low and wet parts of the field he usually gathered in the fall a few nubbins, but went to the high ground for his crop. In the fall of last year, he obtained his best corn from the low land, his worst from the high; and the extra crop of the year, paid for the whole expense of ditching." [Albany Cultivator.

THE PIE PLANT.—A correspondent of the Indiana Farmer expresses the opinion, based upon experiment, that the use of ashes for the pie plant produces a more delicious plant than any other mode of culture—not being sour, but just containing enough acidity to make them pleasant.

EDUCATIONAL.

CONDUCTED BY J. L. ENOS.

Reading.

The vast storehouse of human knowledge is unlocked to man by the *art of reading*, and by it he is invited to partake of the treasures it contains. It unseals the crystal fountains of living waters, where he may quench his mental thirst, and opens to him boundless elysian fields, where he may feast his noblest faculties upon the purest joys and richest treasures of the universe.

But he who learns to read by rote, repeating words and sentences of which he knows no meaning, is like a man so nearly blind, that, having turned together the contents of a rich storehouse, he walks amid its treasures, perceiving here and there a massive pile of grossest merchandise, but knows not that he walks where pearls and diamonds, and precious gems are glittering on every side.

To such, this noblest art, this most invaluable key, is of but little worth. They have the key; but when they venture to make use of it, they see but here and there a bold projecting thought, so plainly visible that the vision of a blind man could scarcely fail to see it; while all the pearls, and diamonds, and precious gems of thought, which lie within the nicer shades of meaning, are unperceived by them.

Hence they find but little pleasure in reading works of merit, where purity of sentiment and style combine, and form a chain of pearls; all, bright and beautiful; but none, or very few, so bold as to strike the vision of an obtuse mind.—Such people have but little taste for reading; or, if they read at all, they seek those works of fiction which paint the strong passions of mankind in glowing colors.

This mammoth evil, which prevails to such a vast extent throughout the land, should be removed. Those who are taught are subject to their teacher's skill and the book together with the living teacher, should so instruct the young, that the full meaning of every word and sentence, in all its strength and beauty, would be readily perceived by them. Teachers must instruct their pupils to think, and no branch of our schools affords so apt an opportunity as the exercise of reading. Thought is and must be a necessary accompaniment of the pupil, if he pursues his work with the greatest benefit to himself.

☞ During the past month we have spent some considerable time in attendance upon Teacher's Institutes, and we have been pleased to learn that their value is becoming more and more apparent in many parts of the state. In their first formation a great mistake was made by the state superintendent, Eleazer Root, who, being ignorant of the real object or design of these institutes, formed societies of a dozen or two members; lawyers, doctors, &c., in some of the counties and gave them the name of *Teacher's Institutes*. *Teachers* finding that nothing was to be gained by such meetings abandoned the idea of attending them; and in all the counties of the state, where those institutes were formed, not over half a dozen have ever attempted to hold a session since; and even in those few cases, so far as I know, the attempt has been a failure. The institutes of eastern Wisconsin were established without reference to any previous county organization and have succeeded very well. Great good has been done, and we predict that next fall, some point in Waukesha county, (perhaps the village,) will witness the largest institute ever held west of the great lakes. The ball has been started right by the intelligent friends of the cause in that region of the state—and in such a case, the wheels cannot be moved backward.

New School Exercise.

We find the following description of a new and interesting school exercise in the Boston Traveler and copy it for the benefit of our readers. It would seem to be a very agreeable way of gathering useful knowledge, and interesting the young in the daily history of the world:

"We are much pleased with a novel school exercise, which has been tried in one of our public schools with great success, and has proved both interesting and profitable to the pupils. For the benefit of the instructors, we give the plan adopted, assuring them that a trial will convince them of its interest and utility.

To each pupil in the most advanced class in school let a country be assigned; to one, we will suppose England; to another, Germany; to another, Russia. Let all the most important countries be assigned, and if the class is not large enough, let a pupil have two or three countries as his portion. Then request each of the pupils who has received an assignment to prepare a digest of every matter of interest which occurs in his or her country, said digest to be presented before the school at some time which may be selected.

We will suppose there is a class of twenty pupils. To each pupil is assigned some division of the world, of which he is to give all the news that may come to hand. Suppose every other Saturday, an hour be spent in the exercise. The whole school may be allowed to participate. The pupil to whom is assigned England, is called on to report. He gives an account of the closing of the Crystal palace, the reception of Kossuth, or some other matter of interest which can easily be gleaned from the digest of news brought every week by the steamship. Let another pupil representing Massachusetts, now rise and inform the school of the result of the Gubernatorial election. And so let the whole globe be transversed.

We are certain that the exercise will prove advantageous. It will give scholars information

which wil be of great benefit to them. There is nothing so important at present as to keep the young well posted in the current events of the day. The facilities for obtaining information are now so great that there will be no difficulty in obtaining sufficient materials. The journals of the day will be read by the young with a far different spirit from that which now actuates them. Instead of stories and anecdotes, they will seek those departments of intelligence which are highly important, but too often neglected.

The same plan might easily be extended with profit. Let similar divisions be made with regard to the sciences. Assign to one pupil astronomy; another, geology; and another, the mechanical arts; and let occasionally an hour be spent in hearing reports as to advancements which have been affected, the new inventions which have been made. We can assure teachers that they will be surprised to witness the alacrity and interest with which the pupils will study subjects generally considered dull and prosaic.

Galls on Horses.

A writer in the Rural New Yorker, with an experience of twenty years, recommends the use of a mixture of whiskey and alum, (as much alum as the whiskey will dissolve,) as a prevention and remedy for galls on horses. Of the value of this remedy, we can add our own testimony, from actual observation. We have used it upon a tender hided horse of ours, for the past three years, time and again, and found it effectual. When the horse is worked, the galled part should be cleansed with cold water at evening, (especially in warm weather) before using the whisky and alum.

"I resorted to this remedy, carrying it with me when I journeyed, and have continued its use with undiminished approval, for more than twenty years. I apply no other remedy. When a horse has been put out for the winter, and has not been used, his breast and back will be tender. A single hour's use of saddle or collar, in a hot day, will then scald the breast so as to produce serious injury. My uniform practice, therefore, has been, for a week before beginning to use the harness, to harden the breast and back by bathing them regularly two or three times a day. No injury has then resulted from the application of the collar — And when a bad gall has actually occurred, a frequent and persevering use of this remedy has secured the constant use of the animal, and healed the wound while in continued service.

Heaves in Horses.

This complaint, so common among horses in the older states, when confirmed, is generally regarded not only as incurable, but beyond the reach of being mitigated to any practical extent. No where, we doubt not, in this country, are horses worked harder, more exposed to the inclemencies of the weather and grained higher, after they arrive at a working age, than here in the west; yet it is a rare occurrence here, to see a horse afflicted with the heaves, while it is equally rare, to find a sound horse five years of age, in all respects. Perhaps the kind of feed used here, in rearing horses, (wild prairie hay and wheat straw, and for working horses, oats and wild hay) has something to do in the matter.

A correspondent of the New York Farmer, says: "In the summer of 1847, my father purchased a fine little horse, for a small sum on account of his having the heaves, he breathed so very bad that it was painful (at least to me) to drive him. I resolved to attempt a cure, or at least to give him some relief. In due time he was turned to grass days, taken up at night, and fed on wet meal. From this time as long as my father kept him, he never was allowed to eat anything dry, and there was a decided change for the better.— After the first of September he was fed wholly on cut feed wet, care being taken to keep him warm. My father kept him three years, during which time he performed as much labor as any horse of his size in town, and after the first six months was as sound as any. Old horse dealers that knew him could not detect anything of the heaves about him.

Probably no horse can be permanently cured of this disease, but as long as they can be kept out of sight, surely so far is good. After my father sold the horse, he was fed carelessly, and the heaves soon returned, I think great attention should be paid to the feeding of horses, their hay should be the best of timothy, or herds grass, well cured and bright. If proper care was taken in this matter there would be less of the disease. Clover hay has in some instances been the direct cause of this complaint. I have fed corn stalks green and dry, cut and uncut, and found them to thrive equally as well as when they were fed on hay."

Wintering Stock on Carrots.—Mr. L A. Sanford, of Gaines, has wintered his cattle and horses in a manner, which I think well worthy the attention of farmers in general.— He raised a fine crop of carrots, and secured them in a cellar near his barn, and saved also all the chaff from his wheat and other grain. He has one of Emery's railroad horse powers on his barn floor, with which he runs an apple grater, (such as is used in cider mills) placed over a box of suitable size to hold the amount of chaff and grated carrots wanted at one time, which are mixed well together before feeding. His horses and cattle are very fond of it, and do well on it, I am told. His stock looks exceedingly well this spring.

[Cor. N. Y. Farmer.

Gardening.

Our limited space forbids many remarks on the garden in this issue. June is, however, a busy month, and the kitchen garden should receive close attention. All vegetables must be well worked and tended. The weeds, also must be exterminated without mercy; for, if suffered to get the ascendancy now, it will be difficult to master them later in the season. Cabbages and tomatoes should be transplanted—peas, cucumbers, lettuce, cress, radishes, Lima beans, and spinach should be sown for a succession of crops. Early sowed vegetables should be thinned out, hoed and kept free from weeds. Ruta bagas should be sown about the middle of this month. Keep a good look out for such insects as prove most destructive to vines and also to cabbages and turnips. Ashes, plaster and hen dung, in equal portions sifted over them while the dew is on, is generally effectual in checking their depredations. A small handful of tansy, laid around each vine, will often save the crop from the striped yellow bug.

ONION MAGGOT.—A correspondent of the the N. E. Farmer, says: "I noticed a short piece in your paper of the 14th ult., written by Ira Brown, requesting to know if there had been any effectual remedy discovered to this maggot. I would just say that if you make a strong decoction of tobacco, and sprinkle your onions once a week, the maggot will not trouble them, for it is a flyblow which the fly deposits on the top, snug to the growing onion; the tobacco prevents the fly from blowing the top. I saw it tried last season with success, only applied three times."

TIMELY.—Tickle your fields in the spring says an old writer, if you would have them laugh in autumn.

POTATOES AND TOMATOES.—It is not so generally known as it deserves to be, that the tomato, when grown among corn is far superior in flavor to those produced in the common way. They must of course have a fair chance of room to grow, and not be too much crowded by the corn. Those who can appreciate the good qualities of this vegetable when in perfection, will find this mode of growing them to secure all they can ask; at least such has been my experience

It has been maintained by some respectable experiments, that potatoes planted among corn are not so liable to rot; and this opinion has been confirmed by a sufficient number of trials to render it worthy of attention.

[Working Farmer.

The Sounds of Industry.

BY FRANCES D GAGE.

I love the banging hammer,
The whirring of the plane,
The crashing of the busy saw,
The creaking of the crane,
The ringing of the anvil,
The grating of the drill,
The clattering of the turning-lathe,
The whirling of the mill,
The buzzing of the spindle,
The rattling of the loom,
The puffing of the engine,
And the fan's continuous boom—
The clipping of the tailor's shears,
The driving of the awl,
The sounds of busy labor—
I love, I love them all.

I love the plowman's whistle,
The reaper's cheerful song,
The drover's oft repeated shout,
As he spur's his stock along;
The bustle of the market-man,
As he hies him to the town,
The hallo from the tree-top,
As the ripened fruit comes down:
The busy sound of threshers,
As they clean the ripened grain,
And huskers' joke and mirth and glee,
'Neath the moonlight on the plain,
The kind voices of dairy-men,
The shepherd's gentle call—
These sounds of active industry,
I love, I love them all,
For they tell my longing spirit
Of the earnestness of life:
How much of all its happiness
Comes out of toil and strife.

Not that toil and strife that fainteth
And murmureth on the way—
Not the toil and strife that groaneth
Beneath the tyrant's sway;
But the toil and strife that springeth
From a free and willing heart,
A strife which ever bringeth
To the striver all his part.

Oh, there is good in labor,
If we labor but aright,
That gives vigor to the day time,
And a sweeter sleep at night,
A good that bringeth pleasure,
Even to the toiling hours—
For the duty cheers the spirit
As the dew revives the flowers.

Oh, say not that Jehovah
Bade us labor as a doom;
No, it is his richest mercy,
And will scatter half life's gloom;
Then let us still be doing
Whate'er we find to do—
With an earnest, willing spirit,
With a strong hand *free and true*,

EDITOR'S TABLE.

To Agents and Subscribers.

This number completes a half year of the current volume of the Farmer; and according to the terms of our prospectus, several hundred dollars are now due us, which we very much need. Owing to our exceedingly liberal terms the present year, our receipts have been very light, as yet.—To those friends who have been prompt in forwarding subscriptions, we tender our grateful thanks. To individual subscribers, the amount is but a mere trifle; but to us the aggregate amount now due, is of much importance. We hope *all* those indebted for the "Farmer" will remember this, and *prove* their appreciation of our labors, by furnishing us means to sustain the present character of the paper, and improve it still more.

This we *cannot* do, at our present *low price* without the CASH now due us to meet our current expenses for paper, printing, the support of our family, &c., &c.

Subscriptions Received for Half a Year.—To those who wish to subscribe for a *shorter* term than one year, we would say; that, owing to our inability to furnish more than about 150 more complete sets of the current volume of the Farmer, we will, contrary to our usual practice—which has invariably been to receive no subscriptions for less than one year—take subscriptions for *half a year*; commencing with the July, and closing with the December numbers, on the same terms, in proportion, as we send a whole volume, viz.: single subscribers, 25 cents in advance, or 5 copies for $1,00, if sent to one address, and at the same rate for a larger number. It is desirable that clubs and single subscribers, should forward their names as soon as possible, in order that we may know what number to add to our present edition.

Now farmers, here is an opportunity for you to subscribe—for a short term, to be sure—but long enough for you to judge of the merits of our paper, and its worthines of your support. And on our part, we pledge ourselves to make the July No., alone, worth to any farmer, *twice* the price we ask for it the whole six months; and we design to improve each succeeding number.

To Correspondents.—Our friends will oblige us, by sending in their favors as *early* as convenient. Correspondents should not argue, that because we *have* sometimes been rather tardy in issuing the Farmer, consequently, such will *always* be the case. We hope to be able hereafter, to take time by the forelock and be in good season. Several good communications have been received too late for insertion in this number, and they will be entirely out of season for next month. And here we beg to assure farmers that we are always glad to hear from them, and hope they will consider the "Farmer" a worthy medium through which to communicate the results of their experience.

The Farmer's Guide.—This valuable work is now complete and the publishers are prepared to supply those who wish with bound volumes.—We have often called attention to this work, and expressed our high appreciation of its value to the agriculturists of our country; embracing as it does, every subject of importance connected with the theory and practice of agriculture, and treating it with an accurate clearness and fullness of detail, here-to-fore unequalled by any work published in this country. The combined labors of two such distinguished writers as Henry Stephens of Edinburgh, and Prof. Norton of Yale College, could hardly fail of producing a complete work.—The work is bound in two large volumes and contains 1600 pages, besides about 600 wood cuts and 14 splendid steel engravings. Every farmer who can appreciate a valuable book, should supply himself at once with a copy of the Farmer's Guide.—For terms see advertisement on the cover of this paper.

☞ We are indebted to the politeness of the Hon. Marshall P. Wilder, President of the Mass. Board of Agriculture, for several valuable documents, relating to agricultural matters in the Old Bay state. Among them is the memorial, presented by the Officers of the Board of Agriculture to the Senate, asking for the establishment of a board or department of agriculture as a government institution; and also calling attention to the establishment of a school for agricultural education.—These able documents present the subjects of which they treat in a lucid, forcible manner; showing by facts, conclusive evidence of the importance of such legislative action, as will tend to foster agricultural science, and form a permanent basis for improvement, in this, the most important branch of our national interests. A bill has passed the senate and house of representatives, establishing a state board of agriculture, consisting of the Governor, Lieut. Governor and Secretary of State, and of one member from each of the agricultural societies in the Commonwealth, that receives an annual bounty from the state, and of three members to be appointed by the Governor and Council.

And Still they Come—The Kentucky Cultivator, published at Cyntiana, Ky., by J. Atkinson, and devoted to agriculture, Horticulture and rural economy; monthly, at $1,00 per year. From the appearance of No. 1, we judge that Kentucky farmers will find it a valuable assistant. "Go ahead, we're sure you'r right."

The Horticulturist for May is received. Lovers of horticultural science, will find this monthly filled with interesting matter, admirably adapted to the advancement of this branch of rural economy. For terms, see prospectus on the cover of this paper.

We have received several new agricultural exchanges, books, magazines, &c, during the last month, some of them very ably conducted journals, but our limited space forbids a more extended notice in this No.

Milwaukee Horticultural Society.—The executive committee of this society, yesterday afternoon appointed the following committees on the exhibition to be made a few weeks hence:

On Fruits—Messrs. C. Hawley, L. W. Weeks and G. A. Tiffany.

On Flowers—Messrs. R N. Messinger, C. Quintin and C. Shepard.

On Vegetables—Messrs. C. F. Lefevre, S. P. Beecher and R. Parker.

A National Agricultural Convention.

After our paper was made up for the press, we received a circular from Boston for the call of a National Convention of Agriculturists, to meet at the City of Washington on the 24th of June. The lateness of its receipt and our limited space, prevents our giving more than a mere outline of the circular or any extended remarks.

On the 14th of January, 1852, the Mass. Board of Agriculture met in Boston and requested its President, to enter into correspondence with the Presidents of State and other Agricultural Associations, on the expediency of calling a National Convention. Several other State Societies through their Presidents or printed resolves, have expressed similar views in relation to establishing a closer union between such Institutions throughout our country.

In pursuance of this object, it is proposed that the various local Agricultural Societies in the United States, unite in a confederation and form a National Agricultural Society, to which all the local societies may be auxiliary; and all such societies are therefore earnestly solicited to send delegates to the Convention, which is to meet at the city of Washington on the 24th day of June, inst., at 10, A. M.

The object being the promotion of Agriculture, by the creation of greater facilities for acquiring and diffusing knowledge by books, journals, seeds and other objects of interest to American farmers and gardeners; also to act upon such other matters pertaining to the advancement of Agriculture as the wisdom of the Convention may judge appropriate. It is hoped that the various organizations, for the promotion of Agriculture in the several States and Territories, will be represented by delegates, and where such organizations do *not* exist, delegations from districts are solicited, consisting in all cases of such number of persons as it may be deemed expedient to appoint.

A large and general attendance is confidently anticipated. Societies are requested to send at as early a date as possible, a list of the delegates they have appointed, to Daniel Lee, M. D., Agricultural Department, Patent Office, Washington.

This circular is sent forth with the concurrence of the following State and other organizations, through their respective Presidents:

Marshall P. Wilder,	Pres't	Mass. Board of Ag.
Frederick Watts,	"	Penn. State Ag. Soc.
Chas. B. Calvert,	"	Md. " " "
Henry Wager.	"	N. Y. " " "
Thomas Stocks,	"	South. Cen. Ag. Soc.
Arthur Watts,	"	Ohio S. Board of Ag.
James Talmadge,	"	Am. Institute, N. Y.
John C. Gray,	"	Mass. Soc. Prom. Ag.
Joseph A. Wright,	"	Ind. State Ag. Soc.
Geo. W. Nesmith,	"	N. H. " "
Fredrick Holbrook,	"	Vt. " "
Josiah Chapin,	"	R I. Soc. for the Encouragement of Domestic Industry.

Raspberry Pie.—Pick over the raspberries—they will not bear washing—put them into a deep dish lined with paste, spreading sugar in the bottom of the dish; cover the raspberries with sugar, dredge them with flour, and bake half an hour.—*Mrs. Bliss.*

Corn Cakes.—One pint good cream, one of buttermilk, one egg, one teaspoonful of saleratus, and one teaspoonful of salt. Stir in meal till it foams; bake quick. If made of good meal this will be excellent cake.

Danger of Candle Grease; Marrow, &c.—It is confidently believed that disease has been introduced into the human system, by the mere application or use of common "candle grease" in cases of chapped hands or lips. Candles are often made of tallow, taken from animals that have died of some foul disease, by which it is rendered unfit for using in this way.

A little marrow taken from the bone of a healthy cow or bullock, and melted in a cup, is excellent for chapped lips or hands. Making a profuse lather of Castile soap on the hands, and rubbing them gently until the lather is absorbed and nearly dried up, is good to soften the skin that inclines to be husky. [Germantown Tel.

Indian Florendines.—One quart of milk, three eggs, one ounce of butter, two table spoonfuls of brandy, sugar to the taste, as much Indian meal as will make the milk as thick as pap. When the milk boils, stir in the Indian meal till it is thickened about like pap, then add the butter. Set it off to cool. When cold, stir in the eggs, which must have been well beaten, then the sugar and brandy. They are very good without brandy.

Make a paste, cover your pie-plates, pour in the above mixture, and bake it in a moderate oven.

Rice Florendines.—One quart of milk, eight eggs, sugar to the taste, a quarter of a pound of butter, one teaspoonful of cinnamon, one teaspoonful of nutmeg, brandy, or rosewater to the taste, rice flour enough to thicken the milk.

ECONOMY AND CONVENIENCE.—A very neat farmer in one of the western counties of New York, who has less than 50 acres, and does nearly all his work with his own hands, accomplishes much by his ingenuity and economical contrivances. His buildings and machines, though of a cheap character, are kept in the neatest order. His barnyard, nearly encircled by his barns and other outbuildings, during the summer is nearly as clean as a gravel walk. A cheap horse power, made by a rope running on the outward ends of radiating arms, drives a two horse threshing machine, a circular saw for cutting his wood, and a small mill for grinding horse feed, and used in churning and various other purposes. His two horses are used for these purposes, when not otherwise needed. His farm is not only a pattern of neatness but is productive of much solid cash; he has a place for everything, and everything in its place. [Exchange.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., JULY, 1852. NO. 7.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER.

TERMS:

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OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

For the Wisconsin & Iowa Farmer.

Things in Illinois.

SPRINGFIELD, Ill., June 9, '52.

FRIEND MILLER.—I reached this very pleasant capital on the first day of the week, and have been much too busy, or too ill, to write—though I intend to keep my promise.

This Central Illinois is a glorious agricultural district—Man need ask for nothing better in the way of fertile soil of the easiest cultivation—But the Western man is seldom content, and the prosperous settler of to-day is the adventurous pioneer of to-morrow.

I find vegetation in this region at least three weeks in advance of Chicago, and the prospect a cheering one for the farmer—Winter wheat fairly headed out on the 5th of June, and looking well, in all respects.

The corn crop is, however, the great crop of Central and Southern Illinois—I have seen many fields of 80 to 160 acres, and a few containing nearly or quite a full "section."—The rows are straight, and can be seen a mile off—The straight line is very stiff, and indeed, almost inadmissible in landscape gardening, but in farming it is essential and beautiful, and aids the after cultivation of the corn crop not a little, by admitting the free and efficient use of the two horse wheeled-cultivators or double-shovel plows, by which one man is saved, and better work performed.

The Legislature is in session, and Governor French has taken strong and liberal ground in favor of Agricultural Education in his message.

Our Convention of Farmers is also in operation. We organized yesterday and have had three sessions already. We find all willing to admit that farmers and mechanics should be educated; but most of the speakers are members or agents of old colleges, and think that the education should be conducted by these old organizations—or in other words, if the State will give them the money, they will promise to create an inferior practical department, and give a few of our sons an inferior practical education,—which shall be *labelled* as "inferior," by the universal acknowledgment of a higher degree, in every college, than the one bestowed upon our sons, and the sons of noble God-ordained LABOR.

Truly Your Friend,

J. A. KENNICOTT.

For the Wisconsin & Iowa Farmer.

Raising Calves.

A short time since I saw an article with the above heading, going the rounds of the papers, from the N. Y. Farmer, stating that Mr. D. M. Crowell raised calves, which, at ten months old would weigh 500 lbs. He fed them on *sour milk* till fall, when they were stabled and fed on *hay & meal.* This is a large story, but from my experience, I am induced to believe it is true.

A few years ago I had two heifers calve, one in June and one in July. Having as many cows to milk as my help desired to attend to, and not relishing the idea of breaking in the heifers, I concluded to try an experiment, and let the calves run with their mothers, with a view to raise a yoke of oxen for my own use. They took the entire milk, and by fall the calves found it necessary to get on to their knees to obtain the milk. The heifers dried

up in the course of winter, and in the ensuing spring both of them had calves again; but as one of the second calves died, the old calf took to sucking his mother and continued to do so all the season. But he growed no faster than his mate of the former year.—These calves had no other feed or care than my other cattle. But at three years old they would girth at least six feet, and I sold them for $50, unbroke.

Last spring I had an Irishman at work for me, who said that "in his conntry" they fed calves on *oat meal* porridge. My calves were taken from the cows at about two days old, and raised by hand, being fed on sweet skimmed milk, and the porridge, and better calves, except the above two, I never raised. This spring my calves are treated as the last, except they get no milk until it has raised all its cream, and becomes sour. The porrige is made new for them twice a day and given to them before it gets entirely cool, and they do even better than those did of last year. These hints may be of use to some of your readers. Winter feeding of oat meal would, no doubt, be good.

ALFRED BRUNSON.

Prairie du Chien, Wis., May 24th '52.

Remarks on the Nutritive value of Corn Cobs.

It is well known that the manure of an animal varies in quality with the food which it eats; and that generally manure is richer in nitrogen bodies, and less rich in non-nitrogenized matter than the food consumed. Probably a greater proportion of 100 lbs. of nitrogen bodies would be assimilated by the system, if it were mixed with 500 lbs. of non-nitrogenized matter, and still more of it mixed with 1,000 lbs., than if taken into the system undiluted or alone. It should be borne in mind that it is as essential for food to contain bodies destitute of nitrogen, (such as starch, sugar, oil, &c,) or those which go to support animal heat, and respiration in the body, as it is for it to have nitrogen compounds to nourish or supply the waste of the living tissues. Hence food, suited best to sustain animal life, is that which is made up of these two classes of bodies, mixed in the proper proportion.—And a deficiency in the one is equally as deleterious to the healthy existence of the animal as a deficiency in the other; therefore we can hardly say that one of these classes is in reality more essential to the maintenance of life than the other. They both seem to perform equally important offices. If this view be taken, the cob cannot be regarded as deficient in those bodies which contribute to support respiration and nutrition.

The table below shows about the amount of the several proximate organic bodies thrown away in rejecting the cob, calculated from the analysis of the small white flint variety.—1000 lbs. of ears contain not far from 200 lbs. of cob and 800 lbs. of grain. These contain the following bodies in the following proportions, expressed in pounds & decimals of a pound

	200 lbs, Cobs.	800 lbs. Grain.	1,000 lbs. Ears.
Sugar and extract,	13.502	115,320	120.902
Starch,	9.083	487.384	487.387
Fiber,	127.687	7.712	135.399
Oil,		39 824	39.824
Zein,		21.856	31.856
Matter separated by potash from fiber,	45.404	51.856	97.260
Albumen,	1.518	37.136	38.654
Casein,	0.188	0 688	0.976
Dextrine or gum,	2.310	20.224	30.534
Resin,	1.806		1.806
Glutinous matter,	7.402		7.402
	200 lbs.	800 lbs.	1,000 lbs.

In the above table, the inorganic matter is not separately considered, it being distributed among the several organic bodies. By rejecting the cobs of 1,000 lbs, of dry ears, about 200 lbs. of organic matter is lost, which consists of 13½ lbs. of sugar and extract, 127½ lbs. of fiber, 45½ lbs. of matter separated from fiber by a weak solution of potash, 1½ lbs. of albumen, 0.288 of a lb. of casein, 2.31 lbs. of gum or dextrine, 1.8 lbs. of resin, and 7.4 lbs. of glutinous matter. Hence the cob, although not rich in nutritive matter, can by no means be said to be destitute of those proximate principles which go to support respiration.

[N. Y. State Transactions, for 1848.

A Remedy for Worms in Sheep.

It is a well known fact that sheep are sometimes troubled with worms in the head, to the great annoyance, if not damage to whole flocks. And various kinds of treatment are resorted too, to stop the evil. Even spirits of turpentine and corrosive poisons, enough sometimes to kill the sheep, are thrown into the nasal passages, which serve only to make the worms recede farther into the cells around the brain.

The most effective remedy that I have ever known, is the following:—Take honey, diluted with a little warm water, a sufficient quantity, and inject into the nose freely, with a 4 oz. syringe. The worm will leave his retreat in search of this new article of food; and when once in contact with the honey, be-

comes unable to return, and slides down the mucus membrane. Then, (say two or three hours after using the honey) give the sheep a little snuff or cayenne, and the effort of sneezing, will place the worm beyond the chance of doing harm. Some of our best farmers have tried this remedy long enough to establish its merit.

To *prevent* this evil, some farmers, in the month of July or August, bore holes in their salt troughs, with a two inch auger, and fill them with salt. And around the top of the holes, apply *tar*, frequently, so that when the sheep eats salt, a morsel of tar clings to the nose, which prevents the insect from depositing its eggs in that region.

[Cor. of the New England Farmer.

Bristol, Jan. 12, 1852.

A firkin should be made of wood that will not impart its taste to the butter, such as Rock Maple, Canada Spruce, Fir, Ash, &c.—The staves should be ¾ of an inch thick after being finished, and made tight without being "flagged," as the Coopers say. Be sure and not use firkins that have the sap on any of the staves, as they will mould, notwithstanding all your care. Neither should you use tubs with bass-wood covers. They should be soaked faithfully with salt and water, and thoroughly dried before being used. The pickle used can be put into another tub and kept till wanted, with a little salt added; thereby saving pickle, and soaking the next tub for use. As to *size*, that will depend on the number of cows; but one that will hold *fifty* pounds is large enough for any dairy, as they sell better than larger tubs.

[Cor. Northern Farmer.

Motion of Sap in Trees.

What a curious hallucination is that which supposes the sap of trees to fall or settle in the winter into the roots! One would have thought that the notorious difficulty of cramming a quart of water into a pint measure might have suggested the improbability of such a phenomenon. For it certainly does require a very large amount of credulity to believe that the fluids of the trunk and head of a tree, can, by any natural force of compression, be compelled to enter so narrow a lodging at the root.

We shall assume the word sap to signify the fluids, of whatever nature, which are contained in the interior of a tree. In the spring the sap runs out of the trunk when it is wounded; in the summer, autumn and winter, it does not, unless exceptionally, make its appearance. But in truth the sap is always in motion at all seasons and under all circumstances, except in the presence of intense cold. The difference is that there is a great deal of it in the spring and much less at other seasons.

When a tree falls to rest at the approach of winter, its leaves have carried so much more fluid than the roots have been able to supply, that the whole of the interior is in a state of comparative dryness, and a large portion of that sap which once was fluid, has become solid in consequence of the various chemical changes it has undergone. Between simple evaporation on the one hand, and chemical solidification on the other, the sap is, in the autumn, so much diminished in quantity as to be no longer discoverable by mere incisions. The power that a plant may possess of resisting cold, is in proportion to the completeness of this drying process.

When the leaves have fallen off, the tree is no longer subject to much loss of fluid by perspiration, nor to extensive changes by assimilation. But the absorbing power of the roots is not arrested; they, on the contrary, go on sucking fluid from the soil, and driving it upward through the system. The effect of this is, that after some months of such an action, that loss of fluid which the tree has sustained in autumn by its leaves is made good, and the whole plant is distended with watery particles. This is a most wise provision, in order to insure abundance of sap for the new born leaves and branches, when spring and sunshine stimulate them into growth.

During all the winter period the sap seems to be at rest, for the re-filling process is a gradual one. But M. Biot many years ago proved by an ingenious apparatus, that the rate of motion of the sap, may be measured at all seasons, and he ascertained it to be in a state of inactivity in mid-winter. Among other things he found that frost had considerable influence upon the direction in which the sap moves. In mild weather the sap was constantly rising, but when frost was experienced the sap flowed back again—a phenomenon which he referred to the contracting power of cold on the vessel of the trunk and branches the effect of which was to force the sap downwards into the roots, lying in a warmer medium; then, again, when the frost reached the roots themselves and began acting on them the sap was forced back into the trunk, but as soon as the thaw came and the ground uncovered its heat, the roots out of which a part of the sap had been forced upwards, were again filled by the fluids above them, and the sap was forced to fall. A large poplar tree in the latter state, having been cut across at the

ground line, the surface of the stump was found to be dry, but the trunk itself dripped with sap. Sap, then, is always in motion, and if it ever settles to the root in a visible manner, that is owing to temporary causes, the removal of which causes its instant re-ascent.

As to the idea that the bleeding of a tree begins first at the root, and in connection with this supposition, that what is called the rise of the sap is the cause of the expansion of buds and leaves and branches, nothing can well be more destitute of any real foundation. If in the spring when the buds are just swelling, a tree is cut at the ground line, no bleeding will take place, neither will the sap flow for some distance upwards, but among the branches the bleeding will be found to have commenced. This was observed some years ago by Mr. Thompson, at that time the Duke of Portland's gardener, who thought that he had discovered that the sap of trees descends in the spring, instead of ascending; a strange speculation enough it must be confessed. The fact is, that the sap is driven into accelerated motion first at the extremities of a tree, because it is there that light and warmth first tell upon the excitable buds. The moment the buds are excited they begin to suck sap from the parts with which they are in contact; to supply the waste so produced, the adjacent sap pushes upwards; as the expansion of the leaves proceeds, the demand upon the sap near them becomes greater; a quicker motion still is necessary on the part of the sap to make good the loss; and thus from above downward is that perceptible flow of the fluid of trees, which we call bleeding, affected.

The well known fact of trees sprouting in the spring, although felled in the autumn, proves that the sap had not at that time quitted the trunk to take refuge in the roots.—Such a common occurrence should put people on their guard against falling into the vulgar errors on this subject. [Professor Lindsey.

☞ The St. Anthony Express gives the following account of the discovery of a Lake within fifteen or twenty miles of that place. It is not a little singular that so large a Lake and so near the Capital of Minnesota, as the one here described, should have remained undiscovered up to the present time.

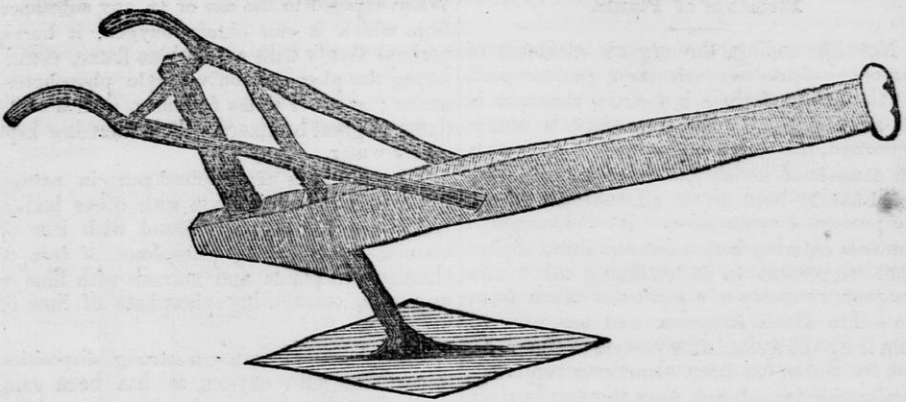
Calvin A. Tuttle and John H. Stevens, two of our oldest and most reliable settlers in Minnesota, together with several others, including the writer hereof, spent, some two weeks ago, three days in the exploration of this Lake. They found it to be from 30 to 40 miles in length, and full 15 miles in width, containing an area of 450 square miles.—They also found numerous islands in this Lake, many of which they visited, and one in particular that will be found on survey, to measure full three thousand acres. The explorers furthermore found the Lake to contain an innumerable multitude of fish, and to be the resort of myriads of wild fowl, countless as the sands upon the sea shore. They found moreover, a splendid belt of timber skirting the borders of the Lake, to the width of from three to five miles, rich in every variety of hard-wood.

Minnesota—Her Trade and Future Greatness.—The Prairie du Chien Courier, says:—

"We know that it is impossible for those residing off this great thoroughfare, to have a perfect idea of its immensity. Not a boat passes but what is literally thronged with passengers, and loaded to the guards with freight. And now that the Sioux treaty is ratified, and millions of acres of the best lands of Minnesota thrown open to the enterprise of emigrants, we may already conceive that it will increase a hundred fold. If Minnesota, as it has been, with such a narrow belt of country capable of sustaining a population, could furnish business for some eight or ten boats, what will it be when the beautiful and *truly valuable* lands of the Sioux are laid open to the hand of the husbandman, and the enterprise of the trader."

New Paint—Valuable Discovery.

Water lime, (hydraulic cement,) mixed with oil in the same way as Blake's Ohio paint or any of the several mineral paints lately brought into use, has lately been discovered to be equal to any other substance used for painting walls, roofs, floors, fences, or any other work; while in point of economy, it as as one to eight or ten. The discovery was accidently made by Mr. John Harold, of Hempstead, Long Island. He sent a man into a store-room to get some of the mineral paint to mix for painting a floor, and the man took of the cement barrel, mixed and applied it before the mistake was discovered. It was put on in the evening, and the next morning was found to be as dry and hard as stone.—Mr. H. then tried it upon fences and roofs with like success, mixed with fish oil and linseed. To give it a severe test, he then mixed it with fish oil and painted two oil casks, upon which it dried quickly and firmly. Farmers, try it. It is undoubtedly worthy of attention. [The Plow.



Grade or Subsoil Plow.

This plow is the only one that we could use to advantage in cutting "hard pan," soft rock, and pipe clay, all of which we had to contend with in our railroad contract. As a subsoiler, it has no superior. It will cut more and easier with the same draught than any other. There is no mistake about its "running the thing into the ground." The advantage in the operation of this plow consists in the cutting edges of the shear. The earth being cut the full width of the shear, presents but little or no resistance to the upright bar when it comes in contact with it. The depth of this plow, (like the Broyles or Coulter,) is regulated by raising or letting down the bar to which the shear is attached into the stock. By this means any desirable depth may be obtained from the draught of one to f ur horses, which cannot be done with the celebrated plow of Ruggles, Nourse & Mason, of New York, it being more complicated and costs three or four times as much as this, which has cheapness, simplicity and strength to recommend it—can be made by any common country smith. When one end becomes worn or dull, the other can be turned forward. It runs smooth and level at any depth it is set at, and can be made a 1, 2, 3 or 4 horse plow, by simply moving the bar in the beam, as before described.

The following is the construction: The shear is in the form of a diamond, 8 or 10 inches in breadth, and 20 to 24 inches in length. A bar 2½ feet long 3 inches wide, and 1 inch thick, split 5 or 6 inches at one end—fastened to the shear with bolts and screws about 4 or 5 inches apart: the prongs of the bar should not be long. The bar is put into a common coulter stock (which is best made from the fork of a sapling it not being so liable to split); the shear should be bevelled from the middle on the upper side, and hollowed or scooped on the under. R. A. S.

[Planter and Farmer.

Double Fruitage.—The Pittsfield (Mass.) Culturist notices a grafted pear tree on the premises of Mr. Gideon Beals of Windsor, which produces two crops of pears each year. For three years in succession, says the Culturist, the tree has blossomed at the ordinary time in the spring, and perfected in due time, (1st to 10th Sept.) a fair yield of large and beautiful pears. For the same three years it has blossomed a second time in the early part of July and started a second crop of pears which go on towards maturity until the season closes, and stops their progress. They are now 1½ inches long and ⅞ inch diameter, and thrifty in appearance. Of the first crop there is said to be more than a bushel on the tree, and that in numbers the two crops are about equal, and that there is not a limb in the tree but has both kinds upon it.

Poultry and Eggs.—I do a small business in raising and putting up garden seeds, and last fall, a year ago, as I was cleaning out some red pepper seeds in my back yard, I threw the shucks and chaff promiscuously about. I soon observed my hens picking them up and swallowing them with great avidity. They soon commenced laying eggs, although they had laid none for a month before. I fed them regularly two or three times a week, since then, with red pepper, and they have never yet stopped laying, summer or winter, spring or fall, except while they were hatching their chickens; and I am confident, from more than a year's experience, that by this method, hens may be made to lay the year round. [Dollar Newspaper.

Elements of Plants.

Notwithstanding the organic elements of plants constitute so much their greater part, yet the study of their inorganic elements is full as important. When a plant is entirely burned, the small amount of *ash* that is left consists of its inorganic elements, the organic having been driven off into the air by the process of combustion. *All* the inorganic elements entering into the composition of that plant are present in its remaining ash. The inorganic elements of a plant are taken from the soil in which it grows, and are selected from it by the assimilative powers of the plant, and are not as has been sometimes supposed, accidentally introduced, from the fact of their presence in the soil. Each individual plant of the same kind, wherever it may mature itself, will be found to be composed of the same elements. And if those elements are not present in any soil, the plant *will not* mature itself there. Another reason why we know that plants possess a selective power over elements is, that two different kinds of plants, though growing side by side, will take into their composition very different elements.

The proportion of the inorganic elements of plants varies from 12 per cent. to less than one per cent. The proportion varies in the different parts of the same plant, sometimes, to a remarkable extent, as in the elm ; the wood containing 1.8, while the leaves contain 11.8. Undoubtedly the selection of elements, the amounts taken, &c., by each kind of plant, are under the control of fixed natural laws.

It is this fact that renders a knowledge of the actual mineral constituents contained in the soil we cultivate of so much importance, especially where long cultivation may have tended to exhaust it of some one or more elements necessary to the growth of a crop.—When this is the case no amount of stable, or other animal or vegetable manure, will create a fertile soil, when perhaps a few dollars expended in restoring the missing mineral elements, will amply restore its fertility.

There are questions that may occur to some readers here which we will allude to further on in the subject. Let us now consider separately the various inorganic elements of plants.

PHOSPHORUS.

Phosphorus was discovered about 200 years ago, and from its remarkable properties it was known as the "Son of Satan." It has a solid, waxlike appearance, colorless, if kept in the dark, but turning to a pale yellow on exposure to light ; it is soft, and easily cut.—When exposed to the air, or to any substance from which it can obtain oxygen, it burns, perhaps slowly with a pale blue flame, constituting the phenomenon we style phosphorescence ; at other times furiously, with a white flame of great brilliance. It is therefore kept under water.

Phosphorus is never found pure in nature, but always in composition with other bodies. In the soil it is naturally found with iron or alumina—constituting phosphate of iron or alumina—in plants and animals with lime or magnesia, constituting phosphate of lime or magnesia.

Phosphorus possesses a strong disposition to combine with oxygen, as has been said, producing phosphoric acid. If a piece of this substance be placed under water, and a jet of oxygen be directed against it, it will take fire, and burn most vigorously under the water.—Phosphorus also combines with hydrogen, constituting a gas called phosphuretted hydrogen, which is given off during the decay of animal bodies, and in part constitutes the offensive smell that characterizes such decay.—This gas inflames by contact with the air, and is supposed to form those deceitful, though beautiful lights seen at night, and called Will-o'-the-wisps or Jack-o'-lanterns.

SULPHUR.

Sulphur, by another name, *brimstone,* perhaps more widely known, is a yellow solid substance, often found in its uncombined state. It has a strong affinity for other elements, and with them forms various important compounds. Among these, sulphuric acid, *oil of vitriol,* stands perhaps foremost.—Sulphuric acid is extensively employed in the arts, and is coming to be somewhat used in agriculture. It has been sometimes applied to the soil, diluted largely with water, when fixed lime or magnesia are present ; it is mostly used, however, to dissolve bones previous to their application to the soil.

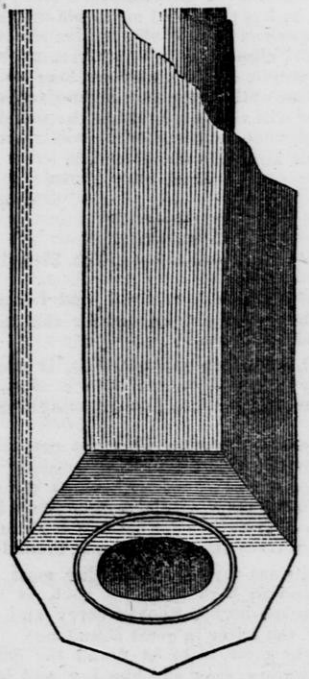
Sulphur combines with hydrogen producing a very offensive gas called sulphuretted hydrogen. The easiest method of ascertaining what the smell of this gas is, is by breaking a rotten egg.

Sulphur or sulphuric acid, with lime, constitutes a substance all are familiar with, gypsum.

CHLORINE.

This substance, when pure, is a gas of a greenish color, much heavier than air. It will support combustion strongly with some substances, feebly with others, and enters into combination directly with metals forming a class of bodies called chlorides. Common salt is composed of this gas united directly with

sodium, so that in technical language, salt is a *chloride of sodium*. Every 100 lbs. of this substance contains 60 lbs. of chlorine. It has been found to promote the germination of seeds, and exerts an influence on vegetation where salt exists in the soil, or is applied as a manure. [Exchange.



Patent Indestructible Water Pipes.

The above cut represents a section of the cement pipe, manufactured in this city, for conveying water. Its great advantage over all metallic conductors is its non-liability to corrosion or oxidation. The tube is constructed of hydraulic cement, enclosed in a sheet iron cylinder, and this again is covered with a thick coating of cement, so that rust or decay is impossible, and the purity of the water secured. This pipe is also cheaper than lead or iron, and may be applied to the construction of baths, water-closets, basins, &c., &c.

Specimens may be seen at the office of this Journal, where further information may be obtained. [Water Cure Jour.

Roman Markets.

Waterton, the naturalist, relates that when in Rome he was more fond of visiting the markets than the repositories of sculpture and paintings. I passed, says he a considerable portion of my time in the extensive bird market of Rome. I must, however, remark, that the studio of Vallati, the renowned painter of wild boars, had great attractions for me ; and I have now at home a wild boar done by him so masterly, that it obtains unqualified approbation from all who inspect it. The bird-market of Rome is held in the environs of the Rotunda, formerly the Pantheon. Nothing astonished me more than the quantities of birds which were daily exposed for sale during the season ; I could often count above four hundred thrushes and blackbirds, and often a hundred robin red-breasts in one quarter of it; with twice as many larks, and other small birds in vast profusion. In the course of one day, seventeen thousand quails have passed the Roman custom house ; these pretty vernal and autumnal travelers are taken in nets of prodigious extent on the shores of the Mediterranean. In the spring of the year and at the close of summer, cartloads of ringdoves arrive at the stalls near the Rotunda. * * * As you enter Rome at the Porto del Popolo, a little on your right, is the great slaughter house, with a fine stream of water running through it. It is probably inferior to none in Italy, for an extensive plan and for judicious arrangements. Here some seven or eight hundred pigs are killed on every Friday during the winter season.

Nothing can exceed the dexterity with which they are dispatched. About thirty of these large and fat black pigs are driven into a commodious pen, followed by three or four men, each with a sharp skewer in his hand, bent at the one end in order that it may be used with advantage. On entering the pen, these performers, who put you vastly in mind of assassins, make a rush at the hogs, each seizing one by the leg, amid a general yell of horror on the part of the victims. Whilst the hog and the man are struggling on the ground, the latter with the rapidity of thought, pushes his skewer betwixt the fore leg and the body, quite into the heart, and there gives it a turn or two. This process is continued until they are all despatched, the brutes sometimes rolling over the butchers, and sometimes the butchers over the brutes, with a yelling enough to stun one's ears. In the meantime the screams become fainter and fainter, and then all is silence on the death of the last pig. A cart is in attendance ; the carcasses are lifted into it, and it proceeds through the streets leaving one or more dead hogs at the door of the different pork shops. No blood appears outwardly, nor is the internal hemorrhage prejudicial to the meat, for Rome cannot be surpassed in the flavor of her bacon, or in the soundness of her hams.

The Guinea Hen: or Pintado.

This bird must be referred to Africa, as the place of its origin. But it has been diffused over a great part of Europe, the West Indies, and the American Continent. The young are considered a great delicacy; and it is said generally fo med a part of the Roman feasts. The females lay a larger number of eggs than the common domestic hens. And on this account, the Guinea Hen is particularly raised and kept. It seems to be a restless animal, and is almost constantly in motion.—It is very noisy, and its sounds are harsh and unpleasant. When it is disturbed, it is very clamorous, as if it would raise an alarm for its protection. The Guinea Hen is of a larger body than the more common one; but its wings are quite short. The tail is pendulous like the partridge. It has no feathers on the head, but on the top is a callous protuberance of a conical form. The general color of the plumage is a dark bluish gray.

Telling the Truth.

Among the wilds of this northern country, between New York and the Canada line there are several gentlemen who are large land owners and who are residing upon, or in the vicinity of their property. They are, most of them at any rate, gentlemen of education, cultivated tastes, and refinement of thought, impulse and habits. They are the exotics of the latitude into which they have been transplanted, and look open eyed upon the manners and customs of the indigenous 'humans' with whom they are brought in contact, and sometimes marvel at the close homogenity that exists between all manner of products in their neighborhood.

Not long ago, as the dates will show, a gentleman in New York wrote to his friend away up in the wilderness of the north, just this side of Canada, asking information in behalf of *his* f iend who had conceived the notion that it might be fun, or profit, to establish himself in "the diggins" alluded to. The reply of the *resident* gentleman addressed is rich as the compost of the St. Lawrence county swamps! The man who can read it without laughing, we respectfully request to "call at the office and settle!" We *stole* the correspondence from a friend who will be astonished to see it in print; but it is rather too good to keep! It is as follows: [Vermont paper.

NEW YORK, Feb. 24th, '52.

MY DEAR HARRY:

A friend of mine who has just disposed of a valuable farm in Wisconsin, is desirous of locating himself some where nearer home. I mentioned your name to him, as the owner of a large tract in ——, and he has requested me to obtain such information, as you may be able to give him, respecting the soil, climate, price of labor, manners, habits of the people, &c., &c., as your long residence there will naturally suggest. If your report is favorable, he will visit your part of the world, in all probability, next summer, and I will recommend him to your kind care and attention.

Most truly yours,

&c., &c.

REPLY.

————, Feb. 29th, 1852.

MY DEAR ——

Yours of the 24th, is received, and I hasten to give you the information desired for the *benefit* of your friend, as follows:

The soil, when you can get at it, is composed principally of conglomerate. viz: a mixture of muck, moss, decayed fern leaves, paving stones and snow.

The face of the country when not covered with snow, is covered with a growth of hemlock, tamarack, spruce and cedar timber, except those portions which the enterprise of former years has attempted to clear—these are covered with stumps, rocks, fallen trees alder bushes, and brambles.

The fruits are various, comprising most of the species found in high latitudes, such as chokecherries. moose-berry, whortle berry and black Raspberry, the latter in great abundance.

Among the game, is to be found the domestic fowl, the swallow. crow and blue-jay, and in midsummer, the night-hawk and screech-owl.

The animals hunted for their fur, are the cat, the chip-munk. and stray dogs—those chiefly esteemed for their flesh, are the musk-rat, skunk, and wood-chuck.

The fishes embrace a great variety, from the tad-pole to the bull-head—the sucker is salted down for winter use.

The principal articles of consumption, are pork white beans. apple-sass and rye-whiskey.

The principal articles of import, are dried-apples, Buffalo coats, tea, tobacco, cotton-cloth, molasses, bogus cigars and spoilt oysters.

The articles of export are few, being only such things as they don't want themselves—the principal are, convicts to Auburn and Sing-Sing Prisons and emigrants to California.

The chief productions are, white headed children, which in time grow to be lumbermen, ped'ers, deacons, squires, politicians and rogues.

Their means of getting a living are ingenious and varied—the most ostensible, however, is 'dickering,' at which they are very expert, swopping horses. trading cattle, and getting boot.

Their chief amusements in winter, are keeping up a fire, watching the weather, going to funerals, whittling. and breaking steers. In summer these are varied, by getting out manure, hoeing corn, acting as scare-crows, and getting 'down sick,' eating green apples.

The range of domestic duties is confined altogether to chance, and the 'women folks.'

Their principal business is an impertinant interfence into people's affairs to the entire neglect of their own, exaggerating evil reports, throwing obstacles in the way of public improvements, talking politics, and doing chores. The young leave the parental roof at a tender age, and commence on their own hook, pedling pop-corn, gingerbread and molasses candy.

The climate is a cross between Lapland and Siberia, not as cold as the one and a good deal colder than the other, but healthy. The principal diseases, are lame stomach, delirium tremens, and 'folks is sick.'

The articles of luxury, most esteemed, are salt codfish, dried pumpkins and woolen gowns.

The articles of furniture, are a cook-stove, mop-pail and wash-dish.

Their farming implements consist of an axe, a hoe, a log chain, generally *hooked*, and a jack-knife.

Their education is confined to writing their name, guessing off hogs, and making axe helves.

Their moral and religious ideas, are vague and loose. They generally live to a green old age, and die as green as they lived.

The principal places of resort, are the platforms at the railroad depots, barrooms, justices courts, and public and private offices, where they have no business.

Their habits are predatory and migratory

If your friend is a bachelor, it may be interesting to him to know, that the females (with a few exceptions) have no front teeth, but their eye teeth are cut early, and are sharp and well developed.

If there are any points not touched upon, likely to influence him in the choice of a residence, I hope you will have no hesitation in asking further enlightenment. Yours ever,

——— ———.

The Horse—Want of Appetite.

This sometimes arises from over-exertion, or immoderate work, which produces general debility, and of course the whole functions are more or less disturbed, and take on the same morbid action. At other times, it is brought on by suffering the horse to overload the stomach and bowels; by standing in the stable without exercise, and eating immoderately of hay. Want of appetite may d pend on a natural delicacy of the stomach, or on the bad quality of the food.

Bad hay is often eaten with little or no appetite, especially when it has been musty.—When the appetite fails, though the food is good, and the horse has only moderate work, the diet should be changed; a small quantity of straw, cut up with what is called cut feed, would be serviceable; but if the horse has been worked hard, rest, probably, is the only remedy necessary. Young horses sometimes refuse the hay or mangle it, from soreness of the mouth in consequence of changing their teeth. This is sometimes attributed to lampas, and the knife or firing-iron is resorted to; this is a barbarous and cruel practice, and should never be permitted. When a young horse is changing his teeth, the whole mouth becomes red and tender, which makes him fearful of eating hay or unground corn, from the pain it gives him. In all such cases, the horse should be kept on scalded shorts, or cut feed, until the soreness of the mouth is removed. In old horses, when the lampas are down to a level with the front nippers, the part should be washed with a strong solution of burnt alum; or make a decoction of powdered bloodroot, and wash the part night and morning. All serious internal disorders are attended with loss of appetite. Weakness of appetite is often constitutional, and cannot be cured; yet it may be palliated: when such a horse is wanted only for moderate work, his appetite may be greatly improved by careful feeding, good grooming, and a well-ventilated stable. The food must be of the best quality, and the water pure and not too cold or hard; he should have but little food at a time, but more frequently. He should never have more, but rather less food put before him at a time than he is inclined to eat; and if at any time he is found to leave food in the manger, it should be taken out, and, after keeping him without food for a short time, some fresh hay, oats, or shorts may be given. The rack, manger, and every part of the stall should be kept clean; and when taken out for exercise or work, the stall should be well swept out, the old litter spread out to dry, and that part unfit for use taken way. At night, some clean, fresh straw should be placed under him. A change of food is often useful, especially when green food or carrots can be obtained. It is the custom in many stables to collect the bedding, after it has been saturated with the fluids of the excrement and urine, and place it under the manger, thus submitting the horse to the noxious vapors, that arise from the filthy mass. Is it to be wondered at, that the poor animal should drag out such a miserable existence?

[Veterinary Jour.

FRUIT TREES.—If the bark on your fruit trees is affected by moss, scrape it off, destroy, the moss by burning, and give the body of the tree a dressing of a mixture composed of 1 gallon soft soap, 1 lb. flour of sulphur, and 1 qt. of salt, well stirred together—to be put on with a hard brush. Such dressings destroy the tendency of the trees to become mossy, destroy the germ of insects which may be lodged in the bark, and encourage a healthful growth the ensuing spring. [Am. Farmer.

Superficial Farming.

A prominent cause of small profits and poor success in many of our farmers, is the parsimonious application of capital, in manures, implements, physical force, and convenient buildings. In their eagerness to save at the tap, they waste freely at the bung. They remind us of the cultivator who candidly admitted his unprofitable system of farming; "but," said he, "I am not yet rich enough to be economical." We observe by a late number of the Mark-Lane Express, that the present *medium* estimate in England, of the capital required to carry on the business of a farm, is £8 (about $40) per acre, "and no prudent man *ought* to rent more than he has that amount, at least, of available capital to go on with; for a smaller possession, with ample means to manage it, will yield better returns than a large quantity of land inadequately stocked." Now, some of our best farms can be *bought* for about the same sum that the English farms are *rented*, and if the above remark is applied to purchasing, instead of renting, it will constitute excellent advice to Americans. This is a subject for a large volume; and we have only space now to say, that if the landowner has not suitable buildings, the value of the grain and fodder wasted in consequence, would soon pay for them; and the food and flesh wasted by exposed and shivering animals would soon pay for them a second time. The want of manure will prevent the value of crops from rising higher than the cost of cultivating them; and the want of heavy crops to feed animals, will preclude keeping enough to make plenty of manure. In other words, a poor and badly cultivated farm will react, and only support a poor and badly-fed race of animals and men—just in the same way that a fertile and thoroughly tilled piece of land will sustain animals enough to manure it and keep up its fertility, and men enough to give it thorough tillage. [Albany Cultivator.

New Virtue in Coffee.—The London Medical Gazette gives the result of numerous experiments with roasted coffee, proving that it is the most powerful means not only of rendering animal and vegetable effluvia innocuous, but of actually destroying them. A room in which meat in an advanced degree of decomposition had been kept for some time, was instantly deprived of all smell on an open coffee roaster beeing carried through it, containing a pound of coffee newly roasted. In another room exposed to the effluvium occasioned by the clearing out of a dung pit, so that sulphurretted hydrogen and ammonia in great quantities could be chemically detected, the stench was completely removed within half a minute, on the employment of three ounces of fresh roasted coffee, whilst the other parts of the house were permanently cleaned of the same smell by being simply traversed with the coffee roaster, although the cleaning of the dung pit continued for several hours after.

The best mode of using the coffee as a disinfectant is to dry the raw bean, pound it in a mortar, and then roast the powder on a moderately heated iron plate, until it assumes a dark brown tint, when it is fit for use. Then sprinkle it in sinks or cess pools, or lay it on a plate in the rooms which you wish to have purified. Coffee acid or coffee oil acts more readily in minute quantities.

My Favorite Manures.—An intelligent farmer, writing in a late number of the Albany Cultivator, decides in favor of horse manure and guano as *the* fertilizers of the soil.—He says:

Good horse manure and guano, in my opinion, are the only real general manures applicable to all soils and all crops. They each contain all the elements of nutrition in proper proportions for the immediate use by plants. I have said they are applicable to all soils; of course I mean to all soils that require manure. It would be folly to apply either to a soil already surcharged with nutrition. And we have all seen soils that were not benefitted by either of them. The reason is, that they already possess too much of nutritious matter: they are unable to *digest it;* they require a remedy for dyspepsia. Generally a free application of lime to such soils will render them highly fertile. It seems to stimulate the creative powers of the soil, and then to make them capable of preparing the rude elements contained in it as food for plants.

Cochineal.

It is not uncommon, among those unacquainted with the source from which this exquisite and highly valuable coloring material is derived, to suppose that it is a vegetable production, grown and cultivated in the tropical climates. Such, however, is not the fact, for it is an animal product. Cochineal, as known in commerce, consists of nothing more nor less than the dead bodies of inconceivable numbers of small insects. These insects are so minute as to resemble, when thrown together in quantities, small grain, and hence, probably, the popular error.

The Cochenial insect has been known for two or three hundred years for its valuable

coloring properties. Special attention is paid to their propagation in several parts of the world, but we believe the largest proportion of the quantity brought to market comes from Mexico. The insect is raised in Georgia and Alabama as well as in some of the West Indies, but the quantity produced in those parts is small, compared with the supply from Mexico. The state of Oxaca, in Mexico, is where the breeding of Cochineal is carried on to the greatest extent. The insects feed upon the flowers of a wild fig-tree called nopal, a species of the cactus. The plant has many stems, upon which buds appear having prickles upon their ends. These buds expand into wide thick leaves, from which the Cochineal insect extracts juice—its sustenance. The nopal is easily cultivated from cuttings, it being only necessary to plant a stem in the ground to have it take root, and grow finely. Cuttings are sufficiently grown for the insects, in eighteen months after planting. In Oxaca there are large plantations devoted to the production of Cochineal. The nopal cuttings are planted two feet apart, and upon some of the stems little nests of cotton are placed on the side towards the rising sun ; in these nests a female insect is placed. The female, after laying about one thousand eggs in the nest, dies, her dead body becoming a covering and protection to the eggs, until hatched. Six generations of these insects are produced every season. The young, as soon as they leave the shells, work their way out and commence feeding. They are at first so minute as to be invisible, except with a microscope. In a little while more their skins harden, forming a cocoon, from which they soon emerge again into the chrysalis state, and then become perfect insects.

When the proper season arrives for gathering the Cochineal, which is in December, the Indian women go patiently to work, using a knife or brush, scraping the insects off from the plants, into their aprons and baskets.—When a large quantity is collected the insects are roasted alive in an oven, which of course deprives them of life, and dries them, when they are ready for market.

Cochineal is one of the most universal coloring materials now used. Unmixed with other matter it produces a beautiful purple color. United with a solution of tin and muriatic acid a splendid scarlet is made, altogether inimitable by any other process.

People are little apt to consider how much they are indebted for comforts and enjoyments, to the insect kingdom. The world is full of them, and they are constantly at work, in some way, for man's benefit, yet they are little appreciated. [Exchange.

Novel Employment of India-Rubber.—An ingenious discovery, by which india-rubber and gutta-percha are rendered applicable to the formation of artificial features and to the covering of artificial limbs has been made by Mr. F. Gray, of Cork-street, London. By this discovery, the necessity of what is called the Taliacotian operation, in supplying the place of a lost nose to a face, is removed, for that feature can be formed, and, as if it were grafted on the integuments in such a manner as closely to resemble nature. The human ear can also be closely imitated by the substance, which perfectly resembles the natural skin and is almost equally flexible. So complete is the deception, that, without the closest inspection, it is nearly impossible to discover that art has superceded nature. This invention is among those which prove the variety of uses to which the materials employed in it can be applied.

A Short Lecture to Young Men and to Young Women too.—In Hunt's Merchant's Magazine we find a great deal of practical good sense, but the following advice to young men, which we clip from its pages, is particularly excellent :

"Keep good company or none. Never be idle. If your hands cannot be usefully employed, attend to the cultivation of your mind. Always speak the truth. Make few promises. Live up to your own engagements. Keep your own secrets, if you have any. When you speak to a person *look* him in the face. Good company and good conversation are the very sinews of virtue. Good character is above all things else. Your character cannot be essentially injured except by your own acts.—If one speaks evil of you, let your life be so that none will believe him. Drink no kind of intoxicating liquors. Ever live, misfortune excepted, within your income. When you retire to bed think over what you have been doing during the day. Make no haste to be rich, if you would prosper. Small and steady gains give competency, with tranquillity of mind. Never play at any kind of game of chance. Avoid temptation, through fear you may not withstand it. Never run in debt, unless you see a way to get out of it. Never borrow if you can possibly avoid it. Do not marry until you are able to support a wife. Never speak evil of any one. Keep yourself innocent, if you would be happy. Save when you are young to spend when you are old."

If you would know the value of money go and try to borrow some—for he that goes borrowing goes sorrowing.

HORTICULTURE.

Brief Horticultural Notes—No 6.

BY JOHN A. KENNICOTT, M. D.

I am afraid of being too prolix, as I have never learned that great accomplishment of a good writer—"the art to blot"—and by the way, I am unfortunate in quotations—even my mis-quotation in the May number is misprinted. But I ought not to blame the printer, for the truth is, *I do* write a miserable cramped and crabbed hand—and I have been rather remiss in my duties also, as I have a great many "irons in the fire"—but I will try to do more hereafter.

The farmers of Illinois meet in convention at the Capital of our State, next week, to compare opinions in regard to AN INDUSTRIAL UNIVERSITY, which we hope our law-makers will create during this extra Session. I intend to be with them, in that long delayed work. Perhaps I may make a letter or two from Springfield interesting to Wisconsin readers. We shall see—and now for a desultory lecture on

PRUNING ORCHARDS.

Every "old countryman" and too many men, born under our clear skies, will tell you to *prune your trees* and "let in the sun."—But don't you do any such thing; but let the tops grow, as nature points the way, and KEEP THE SUN OUT. The more wood the better; provided the WOOD-SYSTEM is not retarding the FRUIT-SYSTEM too much. But cutting out the branches is no way to induce fruitfulness, but the right way to prevent it, and *increase* the effort to make wood. The leaves of a tree are its STOMACH AND LUNGS, and you might as well deprive an animal of these, and expect him to live, as to hope that a tree will flourish without foliage—though the animal would die immediately, and it sometimes takes years to kill the tree, by lopping off branches, because it can produce new organs, and the BARK will act as lungs, until "water-sprouts" and "suckers" can be produced.

If you find a branch where not needed, before cutting it off, see if you can train it so as to occupy a vacant space, for you can not have too many branches, provided they do not interfere with each other, and these can never be too near the earth, in a well shaped upright tree.

I would have my PEACHES and CHERRIES "pyramids based on earth" and I would never have to exceed three feet of naked stem in any fruit tree. You never want to "drive under" your fruit trees—this notion is all nonsense.

If your trees make wood too fast, and put off the season of fruitfulness, unreasonably long, instead of removing the portions which are to bear fruit, stop the inordinate nourishment from the soil, by root-pruning—cutting through the roots in November—or by pinching off the shoots in summer—say August, and thereby aiding the development of fruit buds, instead of wood buds. But if you have the right sorts you will have fruit soon enough, without resorting to any of these methods.

If a tree has been properly pruned in the nursery, you have seldom much use for a pruning knife, as long as the tree remains healthy and grows freely—pare off broken limbs, cut away one, that you can not train where it should go, or that rubs against another, and, if not over half an inch in diameter, do this any time, when the weather is warm—spring or summer; but if the branch to be removed is large, autumn or early spring are the best seasons, and you should have some grafting wax, or, what is better, some Shell-Lac varnish to cover the wound. Shell-Lac varnish is made by dissolving the Shell-Lac in Alcohol—in warm weather, this is easily done, in three or four days. To make it in winter you should set your bottle near the fire, where the heat is equal to 75° to 85°—or summer heat. The solution should be a saturated one, and kept well stopped. You can put it on with a brush or a bit of rag rolled on a stick.

☞ Mr. C. A. DeCoudres has one peach tree which withstood the severe winter, and is now in blossom—the only one, we believe in this section.

[Ozaukee Blade.

BURNT BONES FOR THE PEAR TREE.—We can bear testimony to the value of the bone black of sugar refineries as a special manure for the pear tree. A peck mixed in the soil of a hole three feet in diameter, in which the tree is planted, gives great depth of verdure, and augments both the size and flavor of the fruit. It is probable that the new native phosphate now found in New Jersey and Lake Champlain, will be eagerly sought after by pear cultivators as being the food of pears —*par excellence.* [Horticulturist.

QUINCES LOVE SALT. — The quince tree seems to have a constitutional fondness for salt. We have never seen such superb specimens of this fruit, and such general luxuriance of the trees as at Newport, R. I.—on the sea coast. A gentleman who noticed this fact several years ago, told us lately that he had profited by the hint, in giving to each of his trees a top-dressing of two quarts of coarse salt every spring. By scattering the salt over the surface it dissolves slowly, and does no harm whatever to the roots, but makes both foliage and fruit much more healthy. [Ib.

POTASH A PROPER FOOD FOR GRAPE VINES.—Having, last year seen it stated in a paper, that the ashes of grape vines contained a large amount of potash, I caused three vines, of the same size, to be planted in boxes filled with equal quantities of earth, in which I noted the following results:

No. 1, was supplied, when necessary, with pure water, and in a given time, it increased 6 inches in length.

No. 2, was watered with a solution of whale-oil soap and in the same length of time acquired 9 inches of growth.

And No. 3, I watered with a decoction of potash, and within the same period as above, it grew 18 inches in length!

By the beginning of November, No. 1, and No. 2, dropped their leaves and showed no signs of fruit, whereas No. 3, retained its leaves three weeks later, and in the course of the season shot forth several bunches of fruit, which, of course, were not suffered to grow. This shows the importance of knowing what kinds of salts go to form wood and fruit, in order that we may apply such manures to the soil as the vine or fruit trees require.

I wish we could have full analyses made of our great staple, Indian corn, including the grain, cob, stalk and blades.

ROSWELL L. COLT.

Patterson, N. J.

[Agriculturist.

Lying rides on debt's back.

MULCHING TOMATOES.—There exists in the minds of cultivators a great difference of opinion with regard to the best method of managing the tomato. Some tie them up on bushes, while most people allow nature to take its own course.

Now, sir, my method is to cultivate well, till the vines get large enough to begin to lean and spread, then to hoe the ground over fresh, and cover the entire surface, one or two inches thick at least, with clean straw.

This proves beneficial in keeping down the weeds, in retaining moisture, and in keeping the fruit perfectly clean. I tried the above method last year, at the suggestion of a friend and was perfectly satisfied with the result.

[Cor. N. E. Farmer.

LEAF BLIGHT IN THE PEAR AND PLUM.—F. R. Elliott says: "The leaf-blight has been more extended in the pear and plum this season, than in any previous one in Ohio. Application of common salt and wood-ashes to one tree, and wood-ashes alone to another plum tree, have rendered them free from leaf-blight, and a continued healthy appearance throughout the season. Application of poudrette, ground bones, ashes and lime, all mingled, have rendered pear trees healthy and free from leaf-blight, while those 30 feet distant, without such application have been affected.

LOUISE BONNE OF JERSEY.—This fine variety of the pear, so peculiarly adapted to the quince stock, is remarkable for its early productiveness. The N. E. Farmer states that two trees were bought in the autumn of 1848, by J. Washburn, of Plymouth, Mass., for $1,-25 each. The next season he received a $6 premium for a select dozen of pears which they bore, and $3 for the pears. It is scarcely necessary to say that their cultivation was by no means neglected.

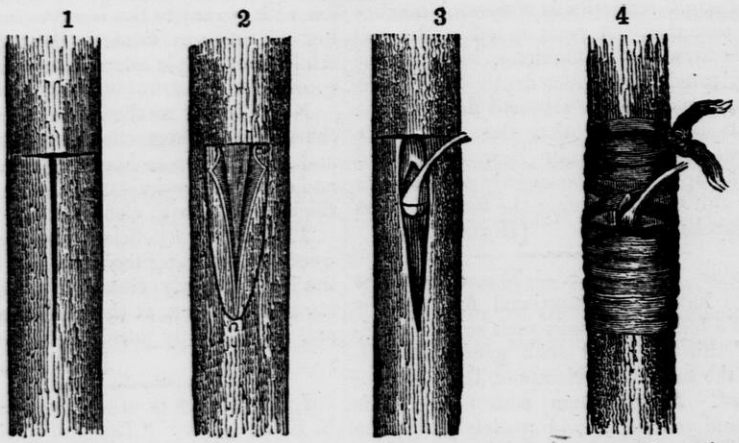
CAUTION IN APPLYING SALT TO FRUIT TREES.—Common salt may be scattered on the surface of the ground at the rate of 300 lbs. per acre, with perfect safety, so far as vegetables are concerned; but it is a dangerous substance to apply to fruit trees.

[Gard. Chronicle.

GRAFTING VINES.—The best time to graft the grape vine is not when the sap begins to rise, for this is of all periods the most improper. Let the vines break into leaf, and then you may graft either on the old or young wood with every chance of success. [Ibid.

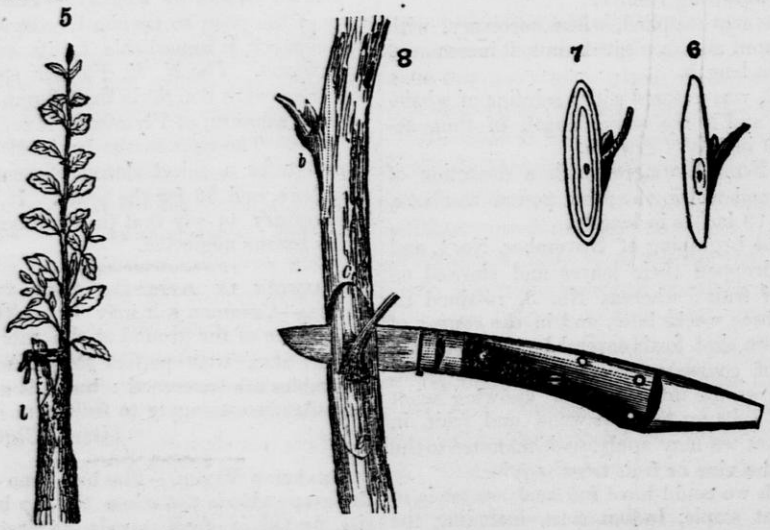
At the working man's house hunger looks in but never enters.

BUDDING OR INOCULATING.



EXPLANATION OF THE ILLUSTRATIONS.—Fig. 1, shows the bark of the stock cut in the form of T. Fig. 2, represents the bark raised from the wood and rolled back on either side to receive the bud. Fig. 3, the bud in its place ready for the bandage. Fig. 4, the bud tied in its place.

Fig. 5, shows the bud tied to the stock after it has started to grow and the line *l*, where the stock is subsequently to be cut off. Fig. 6. shows a bud with the wood taken out. Fig. 7, a bud with the wood in. Fig. 8, represents a shoot, having upon it two buds, and the manner of cutting them off. The knife should enter the bark at *c* about three fourths of an inch above the bud, and come out about the same distance below at *e*. The dotted line along the base of the but *b*, indicates the depth of the incision to be made in cutting the bud from the shoot.



This is one of the most important operations pertaining to Horticulture. For the speedy and sure propagation of trees, it has some decided advantages over grafting; as it only requires a single bud, and if a bud fail the first time others can be afterwards inserted the same season—or if the operation fail entirely one seasen the growth of the stalk is not lost as where grafting fails. The two conditions of plants indispensable to success in budding are—1, *a thrifty growth of the stalk so that the bark will peel easily*; 2, *good ripe buds*, which may generally be known by the perfect develop-

ment of the young buds at the base of the leaves, and by the shield or bark to which the buds are attached, separating easily from the wood—and in short by the general firmness and ripeness of the shoots. Those buds near the middle of the shoots are most esteemed.

Plums and Cherries should be budded early, whilst Peaches do best when set the latter part of August—and in fact are often budded in September.

Apples and Pears can be set from the commencement of the budding season—that is if the buds be ripe—until the last of August; though the first half of August is generally the best time. The time for commencing operations in the budding line, varies considerably according to the seasons—it answering as well to begin the 15th or 20th of July, in some seasons, as the first of August in others.

Before commencing operations it will be necessary to have your stalk in readiness, and to provide yourself with a thin-bladed knife, and a supply of strings for tying up the buds.

Bass or other matting, such as is used around furniture, the inner bark of trees like bass, linden and elm may be used for bands; also cotton wicking, woolen yarn or strips of cloth from the tailors. Matting and bark should be wet before using. In budding, the first thing is to prepare 'a stick of buds'—that is to take off a thrifty shoot of this year's growth, and after cutting off the upper, unripe portion of it, to clip off the leaves, leaving about half an inch of their footstalks on the shoots, as in Fig. **8.** Having selected a smooth place in the stalk, preferring the North or North East side, make a perpendicular incision through the bark an inch or an inch and a half in length, and at the top of this a cross cut, so that the wholeshall form a T, as in Fig. **1.** With the point of your knife blade, or with the haft of your budding-knife, if you have one, raise or loosen the bark from the stalk each side of the incision—being very careful not to bruise either the bark or sap wood beneath as in Fig **2.**—As speedily as possible, and with a clean smooth cut, take off a bud, as in Fig **8,** from your stick of buds with a thin slice of the wood attached. When this wood is loose it is better to remove it, which may be done by putting the edge of the knife under the wood, between it and the bark and lifting it up, taking care not to pull out the root of the bud. Having ascertained that it is about the right length, lift up the bark at the top of the cut and insert the bud, which with the aid of the footstalk should then be pushed down to the bottom of the incision. If the top of the bud reaches above the cross cut it should be cut off so as to fit exactly, as in Fig. **3.** A bandage, as in Fig. **4,** should now be tied evenly and snugly over the whole (saving the bud and foot stalk, which must be left exposed,) extending a little above and below the wound. Care and expedition must be used in the operation to have it succeed well, as if the parts are bruised or suffered to become dry they will not unite. If the footstalk remains fresh and green until it drops, or at the end of about two weeks the bud is seen to be very plump, it indicates that the bud has taken, but if it withers up it shows the contrary. In two or three weeks, or as soon as the union between the bud and stalk is perfect, the bandage should be loosened and if the stock has swelled much it should be entirely taken off. The band needs to remain on the cherry longer than on other stocks. In the spring, from the bursting of buds to the time when leaves reach half their size, cut off the stock in which the bud is good, to within two or three inches of the bud and when the bud has started, if it inclines off, tie it to the stump as represented in Fig. **5.** Rub off the sprouts from the stock so as to throw all the growth into the bud. After the bud has got fairly started, say the latter part of June or first of July, cut the old stock off down even with the bud, in a sloping direction, as at *l*, Fig. **5,** when it will soon be covered with young bark.

We have endeavored to explain the process of budding so fully and plain, that with the aid of the illustrations, any person of ordinary understanding, need not doubt his ability to perform the operation successfully; and we most earnestly urge our agricultural friends to make themselves practically familiar with the subject.

FRESH MANURE NOT GOOD FOR THE VINE.—In all warm countries, where we may suppose the culture of the vine to be best understood, the opinion universally prevails that fresh manure ought not to be used, or if it be so, that it should be applied in the autumn after the vintage, so as to be in a great measure decomposed, and incorporated with the soil before the ascent of the sap in the spring. This practice is occasionally followed in the Rhinegau where a strong prepossession exists in favor of manuring the vineyards, and where small quantities of litter are spread around the roots of the vines ; but the best authors concur in recommending that all the manure employed should be first duly fermented, at whatever time it may be used.

The vine dressers of France generally object to manure altogether. The poet Virgil, however, recommends it in some lines which should be committed to memory by all who grow the vine:

"Next; when you layers in your vineyard make,
Mix some rich dung, and shells and pebbles break,
Spread the good soil with lib'ral hand around,
And trench them deeply in the lightened ground;

Superfluous moisture thus glides through the earth,
And healthy vapors aid the tender birth."

These are wise maxims, and no modern discovery is at variance with them.

We find described, two other modes of budding, which seem to be synonymous however; one in Lindley's Horticulture called Flute Budding, Fig. 1, and the other, Fig. 2, in the water Cure journal called Annular Budding, both of which we publish, more for the benefit of the curious than to introduce them to public favor.

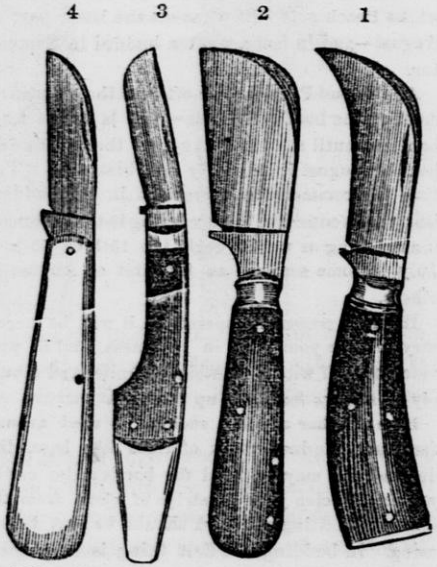
Fig. 1.

"*Flute-Budding* is not practised in this country, but deserves to be mentioned.—It consists of peeling off a ring of bark from the stock, just below a terminal bud; replacing it by a similar ring, with a bud or two upon it, taken from a scion; and binding down the whole.—This is performed only in the spring, and has the advantage of being so contrived that the stranger bud is placed immediately below that part of a branch where processes of organization are most active, namely, below a central bud of the stock; and from occupying all the circumference, it must necessarily receive the whole of the alimentary and organized matter sent downwards by the bud. It is employed in in Bavaria for the Mulberry."

Fig. 2.

"*Annular Budding* fig. 2, is applied with success to trees of hard wood and thick bark, or those which, like the walnut, have buds so large as to render the common mode of budding difficult and uncertain. A ring of bark is taken from the stock *a*, and one of equal size containing a bud, *b*, from the scion. If the stock be larger than the scion, an entire ring will not be taken off, but only what may be filled by the ring of bark from the scion. If the ring of bark from the scion be too large for the stock, it will be reduced so as to just enclose the stock. When thus fitted, tie with matting and cover the wound with clay or grafting-wax, and the work is done."

Pruning and Budding Knives.



These instruments, as denoted by Nos. 1, 2, and 4, are of good and convenient form for pruning young trees and are made strong and heavy for that purpose.

No. 3 represents the best and most approved form for budding. The edge of the blade is rounded at the point, and will shut up as a pocket knife. At the other end is permanently fixed a thin flat ivory lifter, with which the bark is loosened and raised, after being cut to receive the bud.

For the Wisconsin & Iowa Farmer.

Grease your Trees.

Friend Miller—After settling in the village where I now reside, I planted a beautiful elm tree in the street, in front of one of my lots. I prized the tree very highly, and was anxious to protect it from the depredations of horses and other animals running at large.

I placed a large post upon each of two sides, and nailed boards upon them sufficiently high to protect the tree from all animals running at large, except horses. How to protect it from their encroachments was the question, as the tree was in front of a store,

and persons would be apt to tie their horses to the posts by its side. It then occurred to me, that when I was a boy, I had heard "smart young men" say, that if tallow was rubbed upon a horses teeth, he would not eat hay. Thinking that trees could be protected from the depredations of horses, as well as hay, I took advantage of the hint, and rubbed tallow upon the tree above the posts and boards. The result was truly astonishing.—The horses were not only kept at bay, but the growth of the body of the tree, where the tallow was applied, was certainly one-third greater than the portions of the trunk above or below, and was observed by every person who noticed the tree, which was a splendid specimen of forest growth. The tallow, which I applied in a soft state, seemed to penetrate the bark of the tree, which was threreby softened and relaxed ; and which consequently expanded and permitted a more free and healthy circulation of the sap, causing a more thrifty growth of the wood, enabling the tree better to withstand the storms in the open country, to which it was unaccustomed in its forest home. The bilge upon the tree is about five feet above the ground. I afterwards made the same application to the bodies of my fruit trees, and I think I shall witness the same result in their increased growth. Besides the increase in the size of the tree, the tallow or oil, (either of which I think may be used with success,) gives the bark a fine glossy appearance, and renders the body less liable to the attacks of insects. This may be an old story to you and many of your readers ; but it is not so with me. It was a discovery of my own, and one which was the result of mere accident. It was "killing two birds with one stone" in the true sense of the word. If it has been long known to you or any of your correspondents, I should be pleased to hear something upon the subject through the columns of your paper.

Yours very truly,

SOLOMON LOMBARD.

Greenbush, Wis., June.

A little neglect can do a great mischief—for want of a nail the shoe was lost, for the want of a shoe the horse was lost, for the want of a horse the rider was lost.

For the Wisconsin & Iowa Farmer.

SPRINGFIELD, Ill., June 15.

The Horticultural Society of this City had a very creditable show on Wednesday of this week. The display of Roses was magnificent, and of other cut flowers quite respectable ; also good show of Green House Plants. The attendance was great—a perfect jam of delighted visitors.

But I am forgetting to mention the fine strawberries, and abundant early vegetables. Green peas being too common in market, to deserve a place in the exhibition. Strawberries are also plentiful and cheap—principally from the "Cottage Garden" I think. Mr. Ridgley and S. Francis have very fine ornamental grounds, with a great variety of choice flowering shrubs and plants. I am glad to see such taste in the Capital of Suckerdom.

Our convention has closed its labors after five busy and interesting sessions ; and our memorial has been introduced into the House of Representatives. We look for no immediate fruit. But we now *know* that the old colleges can not get the funds belonging to the whole educational interest of the State. Our opponents have delayed the realization of our hopes, and ruined their own. But we can wait—wait and hope !

KENDALL, Kendall Co., Ill., June 11, 1852.

MARK MILLER, Esq.—Has any one in your State ever fruited the Almond out of doors. I saw trees growing finely at Mr. Bell's Nursery some years ago, and was informed that they had blossomed, but never bore any fruit.

Peach trees are poor property here, seldom giving any fruit, except in a few places. The last winter has killed many of the trees, and many look sorry enough—hardly one leaf to a limb. On many trees all the fruit-buds were killed ; on some, a few only escaped.—At some of my neighbor's, while many of their trees were entirely killed, or badly killed, yet a few trees were loaded with fruit blossoms. My Peach trees as a lot, don't average one live fruit-bud to each tree—a few only having any, say 2 to 6, and one had about one dozen. I shall not have as many *Peaches*, as I ought to have *bushels* of them, if they had done well.

We are greatly plagued with Caterpillars, &c., on our fruit-trees, and it seems as though new kinds came every year. We have 'the Caterpillar,' and also several different kinds of them with no webs or tents—and among others *Attacus Cecropia* found on Apple, Pear, Plum, Black-walnut, and I think also, on the Cherry—the Catterpillars of A. C., come in July and August—are 2½ to 3 inches long—as large as the Potato Worm, and are very destructive, stripping trees entirely in a very short time. *Attacus Polyphemus* is also found here; I think it is on the Hazel here; Dr. Harris says it is on Oaks, Elms, and Lime trees or Basswood, in Massachusetts. I have found Catterpillars answering the description, on Hazel bushes one or two years, and have raised both kinds from cocoons last year, and this year. Are you acquainted with these Catterpillars? If you wish, I will send you a description of them. I have made notes for a few years past of every kind of such varmints that I have seen. We have two or three kinds of borers. One which lives in the *trunk*, called *Spada Bivittata* of Say. It seems as tho' another kind which is found on the limbs and which bores behind the buds, does the boring while in its perfect state as a beetle. I have found several of them lately, and found also new holes begun, and bored in about the depth of their heads—and there are one or more kinds of beetles called Elaters or Spring Beetles, or Click Beetles. Our Grape Vines are troubled with Catterpillars of *Philampelus Achemon* of Drury, in July and August—they are 3 inches or more long. If you have Dr. Harris' "Treatise on Insects of New England, Injurious to Vegetation." I will some time give you a list of such of them as are found here, and you can find his descriptions. I have not time now to add more, and remain

Yours Respectfully,

E. S. L. RICHARDSON.

For remarks see Editor's Table.

CHICKENS VS. THE CURCULIO.—We clip the following from a communication of A. G. Sumner, Esq., of Ravenscroft South Carolina, which appeared in the Pendleton "Farmer & Planter," recently:

"For plums, apricots and nectarines, so liable to the attacks of the curculio, there is no remedy but *poultry*. Plant these where your poultry have a daily run among them. I have adopted this plan, and have not found a single tree attacked by the root-worm in my grounds. It takes more than a dozen hens, and a gouty old cock, to keep a few acres of these delicate trees clear of their enemies; a flock of 100 is not too many."

CHIDHAM WHEAT. — We have received from England, two bushels of this very choice white wheat. It was exhibited from the royal farm, Windsor, by his royal highness, Prince Albert, and was one of the best English varieties; weighed 66½ lbs. per bushel. The following is an extract from a letter written by the gentleman who raised the wheat:

"I have forwarded two bushels of the best Chidham wheat I have left, the same as sent to Gen. Weymess, for his royal highness, Prince Albert, at seed time. You may be certain it is the same description as that shown at the Crystal Palace. I have sown no other sort of wheat for the last thirty years, and have grown it several times *from one grain*, that it might be true. The sample sent, tho' equally true and clean, is hardly so bright and blooming as most of it was which I sold for seed."

The wheat received is very fine indeed, resembling somewhat the best samples of the Soule's variety. Should it succeed well here, it will prove a very valuable addition to our choice wheats.

It will be distributed to gentlemen who will cultivate it carefully, and furnish the society with the results of cultivation and a sample of the crop. [Jour. N. Y. State Ag. Soc.

RAIN WATER IS THE PUREST IN NATURE.—It is not generally known, says the Albany Register, that rain water, when protected from the atmosphere, is the purest, healthiest, and sweetest water in use. Mr. J. S. Van Rensselaer has for a great number of years used it for drinking, and culinary purposes, at his late residence, No. 169 State street, and could never meet with any he considered as good. He was first informed of its quality by a sea captain who used it in his voyages from the United States to the West Indies, and who found that by carefully preserving it from exposure, casks which had been shipped at Key West and made their outward voyage, were, on their return to New York, found to be as pure and good as the day they were put on board. Acting on this suggestion, Mr. Van Rensselaer built two cisterns in his yard, covered, cemented and air tight, one of which acted as a reservoir, communicating with the other, from which it was conducted into the dwelling. The cisterns were capable of hold-

ing seventy-five hogsheads, and from the time of their erection long since, Mr. Van Rensselaer has had a bounteous supply of pure, soft, and excellent water.

The only communication with the air was by the pipe which conducted the water from the roof; every rain refreshed the supply and as it was drawn from the bottom of the cistern, the temperature was cool and pleasant. Rain water, as is known, is the purest in nature.

In this case it was conducted from a high slate roof on which no dirt could well accumulate, and the cisterns had required cleaning but once in six years, and then from no defect in the water; at no time has that been disturbed, or lost in the least its pure and wholesome taste, and that flat and rainy taste peculiar to it when caught in open vessels has never been noticed:

It is strange that these simple and interesting facts are not more generally known and acted on; were it so our citizens on the hill might now be supplied with an abundance of water, instead of suffering as they are from the drouth. The cost of cisterns does not exceed $75, and to places where there is a deficiency of good water, we commend this cheap and effectual plan of obtaining it.

MANUFACTURE OF ZINC PAINTS IN NEW JERSEY.—It is well known that extensive operations have been entered into at Sterling Sussex Co., New Jersey, with a view of manufacturing on a large scale the oxide of zinc from the celebrated red zinc ore which occurs abundantly at that locality. The process by which the oxide of zinc is prepared is exceedingly interesting. The mineral consists of oxide of iron, manganese, and oxide of zinc, or oxide of zinc and Franklinite. The ore is first roasted, and the Franklinite picked out. It is then pulverized and mixed with a small proprortion of anthracite of charcoal as a flux; and about forty pounds is used as a charge for a cylindrical retort made of clay, three and a half feet in length, and 8 inches in diameter. The retort is placed in a reverbatory furnace horizontally, one end being exposed by an opening in the furnace wall: a sheet-iron receiver is attached to the mouth of the retort, having an opening at the neck to admit atmospheric air. The receiver is enlarged by flexible tubes that serve as additional receivers and also to carry off the carbonic oxide.—When the proper heat is applied the zinc is set free from the ore, and conveyed into the receiver as a vapor of zinc, where, meeting the current of atmospheric air, from which it takes up the oxygen, it falls at once as a beautiful powder of pearly whiteness. The metallic zinc is made in the same manner, with the exception that in the latter case the air necessary to form the oxide is entirely excluded.

The demand for the oxide of zinc at present is greater than the supply, and the company are constantly enlarging their works. It is used extensively as a substitute for white-lead in the manufacture of India-rubber goods, but its chief value is as paint. In France it has to a great extent taken the place of lead paints, and is being rapidly introduced in the United States. The advantages of zinc as a paint over white lead, in addition to the comparative security of the workmen from disease are, that the action of gases will not change it, while lead paint is turned black by sulphuretted hydrogen; it is perfectly and dazzingly white. It gives to a wall the lustre of porcelain, and may be washed without risk. It is ground in spirits of turpentine, and mixed with varnish to give it a body and consistency. The red oxide of zinc also makes an excellent, quickly drying red paint. By adding lamp-black, Prussian-blue, and other colors, any shade of paint may be readily obtained, free from the disadvantages of lead.

NOISELESS CARRIAGE-WHEELS AND HORSE-SHOES.—In the Mining Journal of July 22d, 1851, we noticed the introduction of some improvements in the construction of wheels for carriages, by A. Smith, which were likely to prove of much value to the public, as not only adding greatly to traveling over paved streets, from their being perfectly noiseless, but from their combining a much greater degree of safety. The principle consists in forming the hoop or tire of two separate layers of galvanized iron, which are riveted together, and re-galvanized in the mass; this division of parts cutting off all vibrations when travelling over the roughest stones. Mr. Smith has also applied the principle to springs, in which each plate is galvanized separately, and can never rust. The axle is also metal, and is itself lubricating, and not liable to heat; the whole secures a degree of quiet, ease and safety hitherto unattained. We have been led to notice these ingenious improvements, from the fact that the patentee, having produced a noiseless carriage, found that the horses' feet made more noise than ever, and, seeking for a remedy has applied the same principle to the horse-shoe. This is effected in the most simple manner, by making the shoes in two thicknesses of galvanized metal, then riveting them together, and re-galvanizing. A horse equipped in these pumps trots over the granite streets of London as softly as if he was on bowling green. [London Mining Jour.

EDUCATIONAL.

CONDUCTED BY J. L. ENOS.

School Celebrations.

Among the many opposing influences which we meet with at almost every step, in our efforts to elevate the character of our common schools and extend their field of usefulness, it is believed that no one is more all-pervading and paralysing in its effects, than the state of apathy which exists among the people with reference to this subject.

Although we are aware that much has been done toward producing a more healthful state of public sentiment upon the question of educational improvement, yet we are forced to admit that the evil of indifference still exists to a great extent. A majority of our school houses are still its monuments; and no less palpable evidence of its prevalence and influences, are to be found in the administration of our school system, by many of our districts and their officers. We find the evidences of its existance in some form, and to a greater or less extent, in almost every school district; and every Town Superintendent can but feel that, through its influence much of the effort now put forth in this cause, though directed by the most consummate wisdom and enlightened philanthropy, must fail of producing its desired results.

The inquiry thus addresses itself to us with peculiar force; what remedy shall we apply, or what means shall we use to remove or mitigate this evil? What measures can we take to secure the attention of the whole people to this subject? How shall we find access to their minds, and produce such a lasting conviction of the magnitude and importance of the interests involved in this subject, as will dissipate this apathetic indifference, enlist the interest of every citizen in behalf of the common schools, and result in universal and vigorous action for their improvement?

In our opinion "school celebrations" in connection with the many other agencies now in operation, may contribute essentially to the accomplishment of these objects.

From a careful, and somewhat extensive knowledge of the practical results of such celebrations, we feel authorized to enumerate the following, as prominent among their many advantages, as one of the instrumentalities by which the right spirit may be disseminated among the people upon this subject.

They present the best opportunity to urge upon the consideration of the people the subject of popular education, by addresses from enlightened friends of the cause, and the most effectual method of bringing all the patrons of the schools under the influence of those addresses.

They bring before the people the actual comparative condition of their schools and excite on the part of teachers, pupils and their parents, an active spirit of generous emulation.

They will enable the public to form a just estimate of the vast difference between good and bad teachers, to canvass and determine their relative merits, to duly appreciate the one, and to detect the quackery of the other.

The opportunity which they afford the public for witnessing the practical results of the different modes of instruction pursued, prepares the teachers and the people to pass an intelligent verdict upon every question relative to the proposed improvements in the methods of teaching.

PENNSYLVANIA COMMON SCHOOLS.—The report of the Superintendent of Common Schools in Pennsylvania showing that there are in that State:

Schools, ...	9,302
Teachers, ...	10,629
At average of salary for the males, $18,19, per month; for female teachers, 10,19.	
Male scholars, ...	247,404
Female do	206,336
Cost of teaching each scholar per month 43 3-4 ct.	
The amount of tax levied was . .	$914,376 96
The cost of instruction	711,643 46
The cost of school houses	275,541 05

The aggregate increase in the number of scholars was 29,298.

EDUCATION IN THE UNITED STATES.—There are 120 Colleges proper, 43 Theological, 17 Law and 37 Medical Schools. The number of volumes contained in the libraries of the Colleges is, as far as estimated from imperfect returns, 871,800. Of the Colleges 13 are under the direction of the Baptists, 8 under Episcopalians, 13 belong to the Methodists, and 11 to the Roman Catholic church.

Handle your tools without mittens—a cat in gloves catches no mice.

EDITOR'S TABLE.

FARMER OFFICE.—Subscribers to the Farmer, who have heretofore received their papers through the Janesville Post Office, and who have no boxes, will hereafter receive them at the Bookstore of Jouaneault, opposite the American. Mr. J. is authorized to receive payment on subscriptions.

REMARKS. — Communications of this kind are very gratifying to us, as they evince a desire for practical improvement among our readers, and also a willingness to impart knowledge to those whose opportunity for observation has been more limited. If our correspondents will make or procure accurate drawings of troublesome insects, or send us insects accompanied by a description, and as much of the history of the same, as they can get, we will engrave and publish them. The havoc made by insects in some localities, threatens almost the entire destruction of many products, and unless their ravages can be stayed, the farmer must abandon the cultivation of some most desirable fruits and vegetables. They create a new field for investigation, and those who have time and opportunity to observe their characters and habits, and recommend modes of extermination, will promote the cause of agriculture, by communicating the results of their observation. Much valuable information may thus be disseminated. The increase of these pests, demands a corresponding watchfulness to counteract the evil; and we need all the light we can get to aid us in the work.

We are gratified to learn that Dr. Harris is preparing for the press, a new edition of his Treatise on the "Insects of New England Injurious to Vegetation." We recommend those of our readers who wish for a work of a practical and scientific character, to possess themselves of a copy. Its suggestions if carried out in practice, will richly repay for purchasing and studying. We have not a copy of the work at present, but as soon as the new edition is issued, we intend to have one.—Any further communications from E. S. L. R., or of other persons of observation and experience will be well received; and we hope our friends will make free use of our columns to express their views and experience on this, or any other subject of interest and importance to agriculturists.

Will some of our readers who have experience answer our correspondent's querries about the Almond? Our own opinion is, that this climate is too cold to produce fruit, though the ornamental varieties flourish finely. The *Large Double Flowering*, and the *Dwarf Double Flowering* are both most beautiful shrubs. The one bearing large whitish flowers, and the other, small double pink blossoms—and are well worthy of cultivation in ornamental grounds.

☞ These remarks should have followed the communication of Mr. Richardson on page 161.

PUBLIC DOCUMENTS.—We are indebted to Hons. Jas. D. Doty, Ben. C. Eastman and Wm. H. Seward, for sundry Congressional Documents. The speech of Hon. Wm. H. Seward upon intervention, and that of Hon. E. Newton of Ohio, on the establishment of an Agricultural Bureau, we have read with much interest. They are short and to the point.

FEMALE LABOR.—Greeley writes of having seen women driving carts, upon the roads of Germany, in which men were asleep. A correspondent of the Boston Transcript says he saw more than one woman, yoked in with a dog dragging a small cart between Munich and Dresden. Every where abroad women are doing the worst work of men, partly because of the absence of real and refined civilization. partly that men are drafted away to the army in such numbers that did not the females plow, hoe, and manure, famine and starvation would come. Nothing can be worse than the degraded, filthy labor of women witnessed upon the first landing in England, poor creatures groping with their naked hands among the dirt of the streets to find something to sell for enriching the soil. Such facts do not need comment.

GAPES IN CHICKENS.—Take as much soft soap as will cover the thumb nail, and mix it with meal dough. Give it to the chicken at any stage of the disease. If this fails on the first application, it rarely does on the second. [American Farmer.

The most worthless of all family treasures are indolent females. If a wife knows nothing of domestic duties, she is not a help-mate, but an incumbrance.

CURE FOR COLIC IN HORSES.—The Southern Cultivator says: "A subscriber in Stewart Co., Ga., gives us, in a private letter, the following as a cure for colic in horses. He says it is a certain remedy; and as it is very simple, we advise our readers to try it, should they have occasion:

"'Mix equal measures of spirits of turpentine and whisky in a quart bottle; dilute with water, and drench. No after treatment is necessary. I have given this remedy with entire success and satisfaction.'"

ANTIDOTE FOR STRYCHNINE.—A writer in the Texas Ranger, gives an account of the successful treatment of some negroes, who had been poisoned with strychnine prepared for wolf bait. Melted hogs lard was administered to them freely after they had suffered in great agony for several hours, and immediate relief was the consequence. This is a valuable discovery.

Flax Cotton.—The right of using Claussen's method of preparing flax, has been purchased by parties in eight different states, and much attention is being given to the growth of flax. Mr. Ellsworth, formerly of the patent office in Washington, and now resident in the Wabash valley of Indiana, has sown five hundred acres with flaxseed; and Col. Baker of Illinois, is largely engaged both in the cultivation and preparation of the plant. [Exchange.

Gooseberry Pie.—Pick and wash the gooseberries, and stew them in just enough water to prevent their burning; when tender, and while hot, sweeten them with sugar, and let them stand until they become cold; then pour them into pie dishes lined with paste, dredge flour, and grate nutmeg upon them, cover them with some paste, wet and pinch together the edges of the pastes, cut a slit in the center of the cover through which the steam may escape, and bake 20 minutes.

How to Catch a Sheep.—In catching a sheep, never seize them by the wool on the back, as it hurts them exceedingly, and has, in some cases, been known to kill them, particularly in hot weather, if they are large and fat. Indeed, the best way is to avoid the wool altogether, and to accustom yourself to take them by the hind leg, or, what is still better, by the neck, placing one hand under the jaw, and the other at the back of the ears: by lifting up the head, a child may hold almost any sheep.

He that riseth late must trot all day, and shall scarce overtake his business at night.

Laziness grows on people; it begins in cobwebs and ends in iron chains. The more business a man has to do the more he is able to accomplish; for he learns to economise his time.

The Family Visitor has been inadvertently overlooked or we should have spoken of its improved appearance before. A new volume is just commenced, with enlarged pages and a splended engraved *head*. It is an excellent journal, deserving a wide circulation. It is a Literary, Scientific and Agricultural paper, ably edited by M. C. Read assisted by the contributions of talented scientific men. Its *visits* will have an improving influence in the family circle. Published weekly at Cleveland and Hudson, Ohio, by Sawyer, Ingersoll & Co. At $1,50 per annum in advance to single subscribers; 8 copies for $10.00; 17 copies for $20,00.

The Dodge County Democrat. No. 1, Vol. 1, is on our table. It looks well, and we have no doubt will be well supported. R. B. Wentworth, Editor and Publisher, Juneau.

The Rock River Democrat, a new weekly paper just started in Rockford, Ill., by Benjamin Holt. Its appearance is neat. We wish it succes.

The German Paper, recently started in Racine, has been removed to Oshkosh.

Union of Papers in Madison.—The Argus and Democrat have been united and appear under the above title. Also the Statesman and Express are united in the Palladium.

Our limited space forbids more than a passing acknowledgement of numerous exchanges of merit. Several notices of periodical publications being unavoidably crowded out of this No. of the Farmer. We trust our friends will accept our apology.

The Horticulturist for June, interesting and instructive as ever is on our table.

The Western Horticultural Review for June, is received. Western Agriculturists and Horticulturists should patronize it. The Ohio Farmer & Mechanic's Assistant is occasionally received.—More frequent visits from so good a paper would be acceptable.

The Family Circle.—This exceedingly neat magazine, improves with age and fully sustains its former character. The embellishments in the current vol. are superior to those of any preceding volume, and form a very attractive feature in the work. It is published in New York by J. G. Reed —Terms, $1,00 per year.

Free Ferry.— The citizens of Prairie du Chien have established a free Ferry across the Mississippi at that point. This is a praiseworthy move; one which, we doubt not, will secure to that route a great accession of eastern emigration destined for Northern Iowa and also facilitate trade between the opposite sides of the river.

Coal Discovered.—The Lake Superior Journal says an extensive coal bed had been discovered in the vicinity of L'Ance Bay, and in the immediate vicinity of extensive iron mines. This is an important discovery which cannot but add to the wealth and business of that community.

New Potatoes.—Our thanks are due Mr. C. E. Hoyt of Emerald Grove for a basket of fine large new potatoes, presented us from his farm—the first we have seen or heard of in these 'diggins.' They don't eat bad after being confined to old "Fogies" for some weeks at a dollar a bushel. If any one can beat Mr. H. on raising new potatoes we would like to know it—that we would!!

Improved Stock.—Mr. A. P. Lyman has recently brought into the County, a full blooded Devon bull and cow, and a full blooded Durham bull and cow, bred by Mr. R. H. Van Rensalær and F. Roche, of Morris, Otsego Co., N. Y. He has also received a pair of Leicestershire, and a pair of Southdown sheep, full bloods. We have seen the stock. and we venture to say it is by far the best in the state. Mr. L. spent some days in search of

this stock, and those acquainted with the price of imported stock, will see at once that this purchase, together with the transportation, was attended with no inconsiderable expense, a sum that would astonish those in the habit of buying cattle for $20 or $25 a head.

The farmers now have an opportunity to improve their stock, and we confidently expect that Sheboygan County will produce more fine blooded cattle than any other in the State.

[Sheboygan Mercury.

This effort to introduce good stock into Sheboygan County, is commendable, and we hope the farmers in that region will not be slow to take advantage of the opportunity to improve their breed of neat cattle.

The example should be followed by other parts of our State, until improvement is visible on every farm. We hope to soon see the nondescript breed of cattle we have in this State numbered with the things that were.

M'KEY & BROTHER.—See the advertisement of M'Key & Brother. If you want to buy goods cheap and in endless variety, give them a call. They are in daily receipt of heavy invoices of new goods and styles—buy and sell for ready pay, believing in the old maxim—"a nimble sixpence is *better* than a slow shilling."

NEW SODA FOUNT.—Those who want a glass of soda of the first proof, will find it at the Philadelphia Drug Store, opposite the Stevens House. Mr. Ogilvie, the gentlemanly conductor of this establishment, has fitted up a new Soda Fount, with all its paraphanalia, in tip top style, including a catalogue of Syrups "to numerous to mention."

THE BADGER REAPER.—We would call the special attention of farmers to the advertisement of the Badger Reaping Machine. From the testimony we have received from a number of farmers in Wisconsin and Illinois, who have used them, we are strongly inclined to the opinion, that they are the best now in use. At the last Rock County Fair this Reaper received the *first premium*, and the *second*, at the State Fair, held at the same time; while the first premium was awarded to another. This reversal or difference of opinion, between the State and County Committees, we consider no disparagement to the Badger Reapers, as like decisions were made in regard to other things entered for premiums, at the same Fairs. It is a notorious fact, that many of the Committees of the State Society, were injudiciously selected. A member of one of them, remarked to us, that he knew no more of the relative merits of some articles upon which he passed, than the man in the moon.

DOORS, SASH, BLINDS, &c.—The attention of all, in want of such fixings, is directed to the advertisement of J. Turnbull, Racine, in our advertising department. Mr. T.'s facilities for procuring lumber, and manufacturing with the most improved machinery, enables him to turn out superior work, and sell at lower prices than any other establishment in the State. We would advise all, in want of anything in his line to give him a call, if they would consult their own interests.

PLANING MACHINE.—Call in at the next door, where you will find Thos. Harvey's Steam Planing Machine. You will find him at all times, prepared to sell you dressed flooring and siding, well seasoned, at about the same prices you can purchase it for in the rough, from the yards. It is economy to procure lumber dressed by machinery, as it is less expensive, better done, lighter to transport, and makes a better job when worked up.

OILS, PAINTS, &C.—Look out for 137 Main St., (our old head quarters,) where you will find Langlois on hand with as good a stock of Paints, Oils, Glass, Putty, Window Shades, &c., &c., as the most fastidious need select from. Mr. L. is a practical painter, and understands how to select genuine articles in his line. He sells none other, and at low prices.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., AUGUST, 1852. NO 8.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER.

TERMS:

50 Cents a Year in Advance;

Five copies for $2, if directed to one Post Office. and at the same rate for a larger number. All subscriptions to commence with the volume. Back numbers supplied to new subscribers.

ADVERTISING;

One page per year	$50
Half page " "	30
Quarter page	18
Eighth page	10
One square, (twelve lines or less,) 1 year	6 50
(Less than one year,) for first insertion	2 50
For each subsequent insertion	75

OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

Wisconsin State Fair.

We wish to call the special attention of our readers, to the PREMIUM LIST and regulations of the WISCONSIN STATE AGRICULTURAL SOCIETY, for the SECOND ANNUAL FAIR, which will be held at the City of Milwaukie, on Wednesday, Thursday and Friday; October, 6th, 7th and 8th, ensuing. We wish also, to make a few suggestions, in regard to this annual exhibition, and urge our citizens, in every part of the State, to interest themselves, in this congregation of their industry, in which *all* may, and should unite their efforts to make the occasion one of interest to all who attend, as well as for the general welfare.

We have made but slight allusion to this matter, at an earlier day; not from any want, however, of an abiding interest in the progress of our State Society; but because we have believed, that the interests of the Society would be better subserved by so doing.—Early in the spring, a very large number, (several hundreds) of the *Premium Lists*, were distributed throughout the State, by the obliging Secretary of the society, MR. INGHAM. Many of these circulars have undoubtedly, by this time, been lost, mislaid or forgotten; hence, its appearance in the Farmer, at the present time, will not only refresh the recollection of those who have forgotten it, but place it before no inconsiderable portion of our citizens, who have not before had an opportunity of seeing it. And while there is yet ample time intervening, between the present and that appointed for holding the FAIR, for all to make due preparation for it; yet it is not so far distant as to induce delay, or remissness on the part of those who intend to take part in the exhibition.

We make this explanation to the inquiry, which has been made, almost, times without number, "why we did not publish the Premium List of the State Society, in the Farmer?"

Of the important bearing, which Agricultural Associations, and the holding of Fairs have upon the business operations of those who take part in them, as well as upon the whole community, brought within their influence, we have often spoken through the columns of the Farmer; and we believe our humble appeals have contributed in some measure, to stir up a spirit of inquiry, and action, among our readers. We now have a flourishing State Society of Farmers, who have held their first fair, and are on the eve of their second. We have, too, *Nine* County Societies, five of which have held fairs, and all will, the present season—and all this has been done within a few months. The ball is fairly in motion—let it roll on.

The sole object of these Fairs is to stimulate the industry, elevate the character of the community, and aid the diffusion of useful and practical knowledge; such as will improve our general agriculture, and thereby increase our State and individual wealth. No one should have personal motives to subserve, or private feelings to gratify. Each individual should remember, "that it is the aggregate zeal of *all* that gives life, and energy, and spirit to the honorable competition of an Agricultural Exhibition." Let there be no *envious* spirit of ri-

rivalry. It is praisworthy and noble to cherish the natural desire to excel; but, that desire should not be prompted by a mere consideration of dollars and cents in premiums; but by a more enlarged and generous impulse—the distinction obtained for producing the best—and that of drawing out and diffusing "those lights of knowledge which shall here be shed by the practical experience of others;" giving a more enlightened direction to labor, in every department of industry.

Fond Du Lac County Agricultural Society.

An adjourned meeting was held at Rosendale on Saturday, July 17th, for the purpose of organizing a County Agricultural Society for Fond Du Lac County. The meeting was called to order by the chairman, H. W. Wolcott Esq. of Rosendale. The committee, appointed to draft a Constitution for the Society, reported; the report was accepted, and the following CONSTITUTION was adopted.

Art. 1. This Association shall be called the Fond Du Lac County Agricultural Society.

Art. 2nd. The object of this Society shall to promote the interests of Agriculture, Stock-breeding, Horticulture, the Mechanic Arts, and Domestic Manufactures.

Art. 3d. The officers of this Society shall be a President, three Vice Presidents, a Treasurer, a Recording Secretary and a Corresponding Secretary; all of whom shall constitute a Board of Directors, to control the general interests and call meetings of the Society.

The election of all officers of the Society shall be by ballot, at the time of the annual meeting (after the first election) and they shall hold their officers until the next succeeding annual meeting, and until the election of their successors.

Art. 4th. The above named officers shall perform the usual duties attaching to such officers; shall appoint a business committee, consisting of one person from each town of the County; and shall also, make all necessary arrangements for fairs and exhibitions; and shall have power to appoint all necessary committees, and shall attend to all other interests of the Society. A majority of the Board of Directors shall constitute a Qorum of the Board.

Art. 5th. The business Committee shall endeavor to promote the interests of the Society in their respective towns; by obtaining new members, and extending information of its operations.

Art. 6th. The annual meetings of this Society shall be on the third Wednesday in January of each year, at 10 o clock, A. M. in the city of Fond Du Lac.

Art. 7th. Ten persons, actual members of the Society, shall constitute a quorum for the transaction of business, at any regular meeting thereof.

Art. 8th. All officers shall be members of the Society and residents of the county.

Art. 9th. The enrollment of the name, and the payment of fifty cents, and the payment of fifty cents annually thereafter, shall constitute any person a member of this Society.

Art. 10th. The President shall deliver, or cause to be delivered, an address at each annual meeting.

Art. 11th. The Board of Directors shall have power to enact such by-laws, not incompatible with the Constitution, as they may deem necessary.

Art. 12th. This Constitution can only be altered or amended, at a regular meeting, by a vote of a majority of the members present.

The following persons were elected officers of the Society until the first annual meeting.

President, Hon. N. M. Donaldson, Waupun.
V. do John Elwell, Taycheedah.
do R. Jenkinson, Metomer.
do C. F. Hammond, Rosendale.
Treasurer, S. M. Haves, Fond Du Lac.
Cor. Sec. Elliot Brown M. D. Lamertine.
Rec. Sec. Storrs Hall M. D. Rosendale.

Resolved, That the Secretary furnish a copy of the above proceedings, to be published in the papers of the County, and also to the Wisconsin Farmer, published at Janesville.

Resolved, That this meeting adjourn, sine die.

S. Hall, *Rec. Secretary.*

Rosendale, July 17th, 1852.

OMISSION.—To make room for the premium list for the State Fair, and Dr. Kennicott's Horticultural Notes, we are compelled to omit our usual variety of Educational matter, with several communications and inquiries; all of which will be duly attended to in the next number.

State Fairs For 1852.

Wisconsin, at Milwaukee, Oct. 6th, 7th, 8th.
Michigan, at Detroit, Sept., 22d, 23d, 24th.
Ohio, at Cleveland, Sept., 15th, 16th, 17th.
N. York, at Utica, Sept., 7th, 8th, 9th, 10.
Penn. at Lancaster, Oct. 20th 21st, 22d.
Vermont, at Rutland, Sept., 1st, 2d, and 3d.
Georgia, at Macon, Oct., 18th, to 23d---6 days.
Kentucky, Lexington, Commencing Sept., 14.
R. Island, Providence, Sept., 15th, 16th, 17.
Canada West. at Toronto, Sept. 21st, to 24th
The New, England Poultry Society. The Exhibition of this Society will be held in Boston on the 7th, 8th, 9th and 10th, of Sept.—

CRAWFORD COUNTY COURIER. Such is the title of a new paper, recently established at Prairie Du Chien, by Hutchinson and Hurd. It is handsomely printed, conducted with a good degree of talent, and gives promise of usefulness to the citizens of its locality. Judging from the liberal support, which the Farmer is receiving from Crawford County, the Courier will be well sustained.

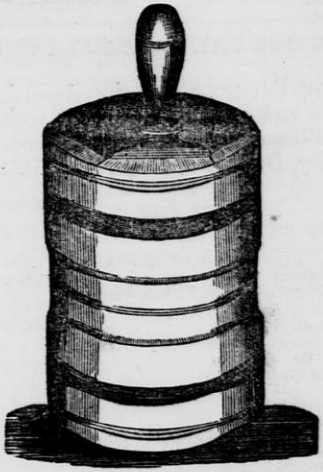
NATIONAL AGRICULTRAL CONVENTION.—The proceedings of this body, which met at Washington, on the 24th, of June, will be noticed in the Sept. No. of the Farmer.

Carret Coffee.

A correspondent of the Rural New Yorker says: "If the carrot be properly prepared and dried with care by a gentle heat, the beverage made therefrom is in all respects equal to the best Java. It is also a yankee custom as well as German. The good old Dr. Tracy, of Middletown Connecticut, of whom it could be said in his day, there was none more successful in his practice, administered the carrot successfully in cases of jaundice, and pure carrot coffee was a favorite prescription of his for patients, especially those in a convalescent state.

The carrots, when dried, may be used without grinding. In this case, clear coffee is obtained, of a delicate color, and without the trouble of settling it or having grounds.—When this method is taken, the full strength is not obtained at the first drawing.

The addition of good sweet beets, rather improves the quality. They may be dried at the same time, and in the same manner, and with the carrots. Let those who have never used the carrot for this purpose, make a trial, and they will be pleased to find they can have a fine article, equal to any real coffee, and devoid of the bad effects which many do tell us arise from habits of coffee drinking.



The above cut represents a butter mould, with stamps placed in the bottom, of various patterns. This mould is six sided, a convenient form for packing, so as to leave no interstices between the lumps. The same form is used by bees in forming their cells, for which they have been complimented as perfect mathematicians. The mould holds just one pound of butter, so that this plastic production, with this simple and cheap apparatus, costing only one dollar, may be quickly put up in pound lumps without the trouble of weighing, having the most convenient form for packing, as well as the best shape for use; and at the same time, it may be stamped with any of the various designs, on the stamps.

WEIGHT AND VALUE OF EGGS.—It is most extraordinary, that the varieties in the weight and value of eggs, as an article of merchandise, should have been so universally overlooked. So far as known, it has always been the custom every where to sell eggs by number, without respect to size, weight, or peculiar quality. Yet no absurdity can be greater. It has been ascertained, by careful experiments recently made by the author, that the fair average weight of a dozen of eggs is 22½ ounces. Recently, on application to a provision dealer, he made answer to the inquiry addressed to him, that he made no difference in the price of his eggs. On examination of his stock, it appeared that the largest egg, weighed 24 oz. per dozen, and the smallest only 14½. In the one case, a fraction over eleven eggs would equal the average weight of a dozen, and in the other it would require over eighteen eggs to reach the proper weight. It appeared, to our mutual astonishment, that the difference in weight between the two kinds was about one-half, while the price was the same. [Dr. Bennett's Poultry Book.

Wisconsin State Agricultural Society.

LIST OF PREMIUMS for the Annual Cattle Show and Fair. To be held at the City of Milwaukee, Wednesday, Thursday, and Friday, October 6, 7, and 8, A. D. 1852.

CLASS A.

CATTLE.

No. 1. SHORT HORNS.

Judges.—George Paddock, Ottawa, (Ch'n.); Thomas P. Turner, Palmyra; Isaac M. Norton, Janesville.

Best bull 3 years old and over,	$10
2d do do	5
Best bull 2 years old and over,	5
2d do do	3
Best 1 year old bull,	3
2d do do	2
Best bull calf,	2
2d do	1
Best cow 3 years old and over,	10
2d do do	5
Best 2 years old heifer,	5
2d do do	3
Best 1 year old heifer,	3
2d do do	2
Best heifer calf,	2
2d do	1
Best 3 cows and 3 heifers, the heifers under 3 years of age, to be owned by exhibitor,	10

No. 2. DEVONS.

Judges.—Curtis Reed, Menasha, (Ch'n.); William. H. Fox, Fitchburgh; ——— Van Meter, Mineral Point.

Best bull 3 years old and over,	$10
2d do do	5
Best 2 years old bull,	5
2d do do	3
Best 1 year old bull,	3
2d do do	2
Best bull calf,	2
2d do	1
Best cow 3 years old and over,	10
2d do do	5
Best 2 years old heifer,	5
2d do do	3
Best 1 year old heifer,	3
2d do do	2
Best heifer calf,	2
2d do	1
Best 3 cows and 3 heifers, the heifers under 3 years of age, to be owned by exhibitor,	10

No. 3. NATIVES AND CROSS BETWEEN NATIVES AND IMPROVED CATTLE.

Judges.—Lemuel W. Joiner, Wyoming, (Ch'n.); George D. Ruggles, Taycheedah; Henry Johnson, Kenosha.

Best bull 3 years old and over,	$10
2d do do	5
Best two years old bull,	5
2d do do	3
Best 1 year old bull,	3
2d do do	2
Best bull calf,	2
2d do	1
Best cow 3 years old and over,	10
2d do do	5
Best heifer 2 years old,	5
2d do do	3
Best 1 year old heifer,	3
2d do do	2
Best heifer calf,	2
2d do	1
Best 3 cows and 3 heifers, the heifers under 3 years of age, to be owned by exhibitor.	10

No. 4. WORKING OXEN.

Judges.—Joseph Goodrich, Milton, (Ch'n.); B. B. Cary, Racine; Jesse Meacham, Troy.

Best team of 10 yoke from any county,	$10
2d do do do	5
Best team from any town, not less than 3 yoke,	5
2d do do do do	3
Best yoke of oxen,	10
2d do do	5

No yoke of cattle competing in teams can compete as a single yoke; nor can a single yoke, competing for premium, be allowed to compete in the county or town teams.

Best yoke of steers 3 years old,	$4
2d do do	3
Best yoke of steers 2 years old,	3
2d do do	2
Best yoke of steers 1 year old,	2
2d do do	1

No. 5. HORSES.

STALLIONS, BROOD MARES, AND COLTS.

Judges.—Hon. Charles Dunn, Belmont, (Ch'n.); Joel P. Mann, Madison; John L. D. Eyclesheimer, Janesville.

Best stallion over 4 years old,	$10
2d do do	5
Best brood mare, do (with foal at her foot,)	10
2d do do do do	5
Best stallion 3 years old,	8
2d do do	4
Best mare do	8
2d do do	4
Best stallion 2 years old,	5
2d do do	3
Best mare do	5
2d do do	3
Best stallion 1 year old,	3
Best mare do	3

NO. 6. MATCHED AND DRAFT HORSES AND GELDINGS.

Judges.—Erastus B. Wolcott, Milwaukee, (Ch'n.); Daniel M. Parkinson, Mineral Point; George C. Pratt, Waukesha.

Best pair of matched horses,	$10
2d do do	5
Best pair of draft horses	10
2d do do	5
Best gelding,	5
2d do	3
Best mare,	5
2d do	3

JACKS AND MULES.

Best jack,	$5
2d do	3
Best pair mules,	5
2d do	3

NO. 7. SHEEP.

Judges.—Hon. Thomas T. Whittlesey, Pleasant Branch, (Ch'n.); Benjamin F. Pixley, Janesville; Reuben M. Norton, Racine.

LONG WOOLED.

Best buck over 2 years,	$4
2d do do	2
Best buck 2 years or under,	3
2d do do	1
Best pen 3 ewes, over 2 years,	4
2d do do	2
Best pen 3 ewes, 2 years or under,	3
2d do do	1
Best pen 3 buck lambs,	3
2d do do	1
Best pen 3 ewe lambs,	3
2d do do	1

MERINOES.

Best buck over two years,	$4
2d do do	2
Best buck two years or under,	3
2d do do do	1
Best pen three ewes over 2 years,	4
2d do do do	2
Best pen three ewes, 2 years or under,	3
2d do do do	1
Best pen three buck lambs,	3
2d do do do	1
Best pen three ewe lambs,	3
2d do do	1

SAXONS.

Best buck over 2 years,	$4
2d do do	2
Best buck two years or under,	3
2d do do	1
Best pen three ewes over two years,	4
2d do do do	2
Best pen three ewes two years or under	3
2d do do do	1
Best pen three buck lambs,	3
2d do do	1
Best pen three ewe lambs,	3
2d do do	1

MIDDLE WOOLED.

Best Buck over two years,	4
2d do do	2

Best buck 2 years or under, 3
2d do do 1
Best pen 3 ewes over 2 years, 4
2d do do 2
Best pen 3 ewes 2 years or under, 3
2d do do do 1
Best pen 3 buck lambs, 3
2d do do 1
Best pen 3 ewe lambs, 3
2d do do 1

CROSS BREEDS.

Best buck over 2 years, $4
2d do do 2
Best buck 2 years or under, 3
2d do do 1
Best pen 3 ewes over 2 years, 4
2d do do 2
Best pen 3 ewes 2 years or under, 3
2d do do 1
Best pen 3 buck lambs, 3
2d do do 1
Best pen 3 ewe lambs, 3
2d do do 1

The sheep must be shorn during the season and the sample of fleece exhibited and deposited with the Secretary for the Museum of the Society.

NO. 8. SWINE.

Judges.—Sherman M. Booth, Milwaukee, (Ch'n.); Ephriam Knowlton, Highland; ——— Barker, Sugar Creek.

Best boar over 2 years old, $5
2d do do 2
Best boar 1 year old and under 2 years 3
2d do do do 1
Best boar six months and under 1 year, 2
2d do do do 1
Best breeding sow 2 years old and over, 5
2d do do do 2
Best breeding sow 1 year old and under 2 years, 3
2d do do do do 1
Best sow six months and under one year, 2
2d do do do do 1
Best lot of pigs not less than 5 under 10 months, 2
2d do do do do 1

NO. 9. POULTRY.

Judges.—Alex. T. Gray, Janesville, (Ch'n.); Truman Wright, Racine; W. W. Brown, Milwaukee.

Best lot of Dorkings, not less than 3, one cock and two hens, $2
Best lot of Polands, do do do 2
Best lot of Malay, or Chittagong fowls, do 2
Best lot of Bantams, do do do 2
Best lot of game, do do do 2
Best lot of turkeys, do do 2
Best lot of Muscovy ducks, do 2
Best lot of small ducks, do do 2
Best lot of Guinea hens, not less than six, 2
Best pair of large geese, 2
Best pair of wild geese, 2
Best lot of poultry, owned by exhibitor, 3

CLASS B.

Judges.—William Burgett, East Troy, (Ch'n.); William Blake, Waushara; Samuel R. McClellan, Kenosha.

NO. 10. PLOWING MATCH.

Best plowing with horses, $10
2d do do 5
Best plowing with oxen, 10
2d do do 5

The plowing match will be held on the Fair Grounds within the enclosure, on Thursday, October seventh, at 10 o'clock, A. M. The competitors for premiums in this class must become members of the Society, and have their names, teams, and the kind of plow to be used, entered on the Secretary's books, by 9 o'clock on the morning of Wednesday, October sixth.

NO. 11. FARM IMPLEMENTS, NO. 1.

Judges.—Mark Miller, Janesville, (Ch'n.); Joseph Kerr, Randolph; Enoch Hazard, LaGrange.

Best farm wagon, $5
Best harrow, 3
Best corn Cultivator, 3
Best fanning mill, 3
Best straw cutter, 3
Best corn and cob crusher, 3
Best flax and hemp dresser, 5
Best horse cart, 5
Best ox cart, 5
Best horse rake, 3
Best ox yoke, 3
Best roller for general use, 5
Best clod crusher and roller combined, 5

NO. 12. FARM IMPLEMENTS, NO. 2.

Judges.—Augustus F. Cady, Watertown; (Ch'n.) J. Milton May, Janesville; Thomas S. Bowen Clarmo.

Best wagon harness, $3
Best carriage harness, 3
Best saddle, 2
Best churn, 2
Best cheese press, 2
Best six milk pans, 2
Best grain cradle, 2
Best six hand rakes, 2
Best six hay forks, 2
Best six grass scythes, 2
Best six cradle scythes, 2
Best six manure forks, 2
Best hay rigging, 2
Best lot of grain measures, 2
Best dozen wire brooms, 2
Best dozen Shaker, or twine tied brooms, 2

Samples of all of the above enumerated articles which will admit of the same must be deposited with the Secretary, for the Museum of the Society.

NO. 13. FARM IMPLEMENTS, NO. 3.

Judges.—Adam E. Ray, Troy, (Ch'n.); Wm. A. Wheeler, Madison; Joseph Powers, Jefferson.

Best horse power for general purposes on the sweep or lever principle, $5
Best horse power on railroad or endless chain principle, 5
Best iron horse power, 5
Best thrasher, to be used with horse or steam power, 5
Best seed planter, for hand or horse power, for hills or drills, 3
Best grain drill, with apparatus for depositing manure, 3
Best corn sheller, horse power, 3
Best corn sheller, hand power, 3
Best vegetable cutter, 3
Best and most numerous collection of Agricultural implements, 5
Best and most numerous collection of agricultural implements manufactured in the state of Wisconsin by, or under the supervision

of the exhibitor, materials, workmanship, utility, durability and prices to be considered in both cases, 10

In these last cases, a catalogue of the implements and the price of each, must be given, and a certificate as to the manufacture.

NO. 14. DAIRY.

Judges.—Josiah F. Willard, Janesville, (Ch'n.); David Temple, Watertown; T. J. Sanford, Exeter.

Best 50 lbs. of butter,	$5
Best 10 pounds of butter,	3
Best 25 pounds of butter made in June,	5
Best 100 lbs of cheese,	5
Best single cheese,	3
Best three butter firkins,	2

A brief statement of the manner of making the butter and cheese must be deposited at the time of the entry, embracing the time of making, the number of cows kept on the farm, the mode of keeping, and in case of butter, the treatment of the cream and milk, before churning, winter and summer, the method of freeing the butter from the milk, the quantity and kind of salt used, and whether saltpetre or other substance has been employed.

NO. 15. FLOUR, MEAL, SUGAR AND HONEY.

Judges.—George W. Hickox, Ridgway, (Ch'n); Jno. H. Rountree, Platteville; Alanson Sweet, Milwaukee.

Best barrel of flour,	$5
2d do do	3
Best sample of corn meal not less than 40 lbs,	3
Best 25 lbs of maple sugar,	4
2d do do	2

The process of manufacturing and clarifying must accompany the sample offered, and must be filed at the time of making the entry.

Best 10 lbs of honey,	$4
2d do do	2
Best bee hive,	3

NO. 16. GRAIN AND SEEDS.

Judges.—Andrew Palmer, Janesville, (Ch'n); John Galbraith, Mukwanego; H. L. Leffingwell, Mineral Point

Best sample winter wheat not less than 1 bu.,	$3
2d do do do do	2
Best sample spring wheat not less than 1 bu.,	3
2d do do do do	2
Best sample of rye, not less than 1 bushel,	3
2d do do do do	2
Best sample of oats, not less than one bushel,	3
2d do do do do	2
Best sample barley, not less than one bushel,	3
2d do do do do	2
Best sample Indian corn, not less than 1 bu.,	3
2d do do do do	2
Best sample of buckwheat, not less than 1 bu.,	3
2d do do do do	2
Best sample of flax seed, not less than 1 bu.,	3
2d do do do do	2
Best sample of hops, not less than 25 lbs.,	3
2d do do do do	2
Best sample of timothy seed, not less than 1 bu.,	3
2d do do do do	2
Best sample of newly introduced grain, valuable to the farmer, not less than 1 bushel,	5

A statement of the manner of preparing the ground, the kind and condition of the soil, the quantity and quality of manure applied, the time of sowing, harvesting, and clearing the crop, and the actual yield by weight and measure, together with the expense of cultivating, must be filed at the time of making the entry.

(Samples of grain and seed in all cases to be deposited in the museum of the society.)

Best sample of crops cultivated and raised on any *one* farm, tastefully arranged and exhibited on a wagon or cart,	$5
2d do do	3

NO. 17. VETABLES.

Judges.—Benjamin Nute, Milford, (Ch'n.); Geo. McFadden, Grand Spring; Lemuel Goodel, Calumet.

Best twelve stalks of celery,	$1
Best six heads of cauliflower,	1
Best twelve turnips,	1
Best twelve carrots,	1
Best twelve beets,	1
Best twelve parsnips,	1
Best six heads of cabbage,	1
Best twelve tomatoes,	1
Best twelve sweet potatoes,	1
Best half peck of beans,	1
Largest pumpkin,	1
Best squash,	1
Best twelve ears of seed corn,	1
Best peck of potatoes,	1
Best and greatest variety of vegetables raised by exhibitor,	3

Discretionary premiums will be awarded on choice garden products, not above enumerated.

CLASS C.

NO. 18. DOMESTIC MANUFACTURES, NO. 1.

Judges. — Stephen O. Bennett, Thompsonville, (Ch'n.); Andrew E. Elmore, Mukwanego; Mrs. Francis Randall, Milwaukee.

Best twelve skeins of sewing silk,	$2
Best specimen of manufactured silk, woven into cloth or ribbons, not less than 5 yards.	5
Best pair of woolen blankets,	4
2d do do	2
Best 10 yards of flannel,	4
2d do do	2
Best 10 yards of woolen cloth,	4
2d do do do	2
Best ten yards of woolen carpet,	4
2d do do do	2
Best hearth rug,	4
2d do	2
Best 10 yards rag carpet,	4
2d do do	2
Best pair woolen stockings,	2
2d do do	1
Best pair woolen mittens,	2
2d do do	1

NO. 19. DOMESTIC MANUFACTURES, NO. 2.

Judges.—Thomas R. Mott, Watertown, (Ch'n.); James M. Burgess, Janesville; Mrs. John B. Smith, Milwaukee.

Best 10 yards of linen,	$4
2d do do	2
Best 10 yards of linen diaper,	4
2d do do	2
Best 10 yards of tow cloth,	4
2d do do	2
Best pair of cotton stockings,	2
2d do do	1

Best pair of linen stockings, 2
2d do do 1
Best lb. of linen thread, 2
[For these two numbers see note to No. 20.]

NO. 20. NEEDLE, SHELL, AND WAX WORK.

Judges.—Charles Doty, Menasha, (Ch'n); Mrs John Catlin, Madison; Miss Frances E. Sheldon, Racine.

Best ornamental needle work, $2
Best ottoman cover, 2
Best table cover, 2
Best group flowers, 2
Best variety of worsted work, 2
Best fancy chair work, with needle, 2
Best worked cushion and back, 2
Best worked collar and handkerchief, 2
Best woolen shawl, 2
Best worked quilt, 2
Best white quilt, 2
Best portfolio worked, 2
Best silk bonnet, 2
Best straw do 2
Best lace cape 2
Best lampstand mat, 2
Best ornamental shell work, 2
Best specimen of wax flowers, 2

Articles in each of these domestic classes to be manufactured within the year; and in all cases the exhibitors must furnish evidence that the articles are so manufactured. And no article manufactured in factories, or out of the family, will be received in this or either of the classes of domestic goods. Exhibitors must accompany their articles with a certificate of manufacture in the family, and within the year.

Discretionary premiums will be awarded on articles of merit not included in the above lists.

NO. 21. FLOWERS.

Judges.—Rufus King, Milwaukee, (Ch'n.); Mrs. E. B. Dean, Madison; Miss Mary Rice, Racine.

Greatest variety and quantity of flowers, $5
2d do do do 3

DAHLIAS.

Greatest variety, 3
Best twelve dissimilar blooms, 2
Best six varieties, 1
Best single variety, ½

ROSES.

Greatest variety, 3
2d do 2
Best six dissimilar blooms, 1

PHLOXES.

Best six varieties, 3
Best three varieties, 2
Best seedling, 1

VERBENAS.

Greatest variety 3
Best seedling, 2
Best six varieties, 1
Best three varieties, ½

GERMAN ASTERS.

Best collection, 3

PANSIES.

Best and greatest variety, 3
Best six varieties, 2
Best collection of green house plants, owned by one person, 3
2d do 2
Best floral design, 3
2d do 2
Best floral ornament, 3
2d do 2
Best hand boquet, *flat*, 3
2d do do 2
Best hand boquet, *round*, 3
2d do do 2
Best basket boquet, with handle, 3
For the most beautifully arranged basket of flowers, 4

NO. 22. FRUIT.

Judges.—J. C. Bunner, Racine, (Ch'n.); M. M. Cothren, Mineral Point; Talbot C. Dousman, Ottawa.

APPLES.

For the largest number of varieties of good Apples, not less than three of each, named and labelled, $5
2d do do do do 3
3d do do do do 1
For the best six varieties of good apples, not less than three of each, named and labelled, 4
For the best three varieties of good apples, not less than three of each, named and labeled, 3
For the best seedling apple, not less than twelve in number, 2

PEARS.

For the largest number of varieties of good pears not less than three of each, named and labelled, 5
2d do do do 3
3d do do do 1
For the best three varieties of good pears, not less than three of each named and labeled, 4
For the best variety of pears, 2

PEACHES.

For the best exhibition of good peaches, 3
2d do do do 2
3d do do do 1

PLUMS.

For the best exhibition of good plums, 3
2d do do do 2
3d do do do 1

GRAPES.

For the best exhibition of good grapes, 3
2d do do do 2
3d do do do 1

QUINCES.

For the best twelve quinces of any variety, 2
2d do do do 1

MELONS.

For the best specimen of any variety of water melons, 2
2d do 1
Best collection of water melons, 3
For best specimen of any variety of musk melons, 2
2d do do do do 1
Best collection of musk melons, 3
For the best display of fruit, of different kinds tastefully arranged, 3
2d do do 2
3d do do 1

To be accompanied with a full description of the manner of cultivation, nature of soil, &c.

Any premiums may be withheld, in the discretion of the committee, if the samples exhibited are not worthy of a premium.

The fruit exhibited for which premiums are awarded, to be at the disposal of the Executive Committee.

No person can receive but a single premium on the same fruit.

The description of the manner of cultivation, &c., must be filed at the time of making the entry.

NO. 23. PAINTINGS.

Judges—Wm. L. Utley, Racine, (Ch'n.); J. T. Lewis, Columbus; Geo. W. Cate, Portage.

Best specimen of painting, in oils,	$5
2d do do do	3
Best specimen of painting in water colors,	5
2d do do do do	3
Best specimen of animal drawing,	3
Best drawing of Show Grounds, for Society,	10
Best Daguerreotype of Domestic animals,	3
Best Daguerreotypes.	3
Best specimen of card printing,	3
Best specimen of book printing,	3

The articles under this head to become the property of the Society, and be deposited in its Museum.

CLASS D.

NO. 24, STOVES, CUTLERY AND SILVER WARE.

Judges.—Sheldon C. Hall, Whitewater, (Ch'n.); William Bonnell, Milwaukee; Hiram Barber, Juneau.

Best cook stove,	$5
2d do	3
Best ornamental parlor stove,	5
2d do do	3
Best hall stove,	5
2d do	3
Best sample of hollow ware,	3
Best exhibition of table cutlery,	3
Best exhibition of pocket cutlery,	3
Best exhibition of silver ware,	3
Best exhibition of brittania and argentine ware,	3

NO. 25. MISCELLANEOUS AND DISCRETIONARY DEPARTMENT.

Judges.—I. A. Lapham, Milwaukee, (Ch'n.); Morgan L. Martin, Green Bay; B. B. Spaulding, Marquette.

This department embraces all articles which may be offered for premiums not enumerated in the foregoing classes.

ESSAYS.

Judges.—Hon. E. V. Whiton, Janesville; Hon. Thos. T. Whittlesey, Pleasant Branch; Francis Randall, Esq., Milwaukee.

For the best practical essay on farm husbandry, generally, $25

For the best practical essay on any one branch of Agriculture, $25

REGULATIONS.

The Milwaukee and Mississippi Railroad company will carry passengers over their road during the week of the fair at half price, and animals and articles for exhibition free.

FORAGE and WATER for stock, will be provided on the ground free of charge to the owners.

ADMITTANCE.—Persons may become members of the society by paying $1, which will admit the person and his wife, and children under 21 years of age to the exhibition, during the continuance of the fair. Single admission 10 cents.

ENTRY OF ARTICLES AND ANIMALS.—Exhibitors are requested to enter their articles and animals on the Secretary's book previous to 9 o'clock, A. M., on the 6th day of October, and must be bro't within the enclosure as early as 12 o'clock, in order that they may be suitably arranged. This rule will be rigidly enforced. No articles or animals will be admitted thereafter.

Members of the society only, will be admitted to the grounds on Wednesday.

THE ANNUAL ADDRESS

will be delivered on Friday afternoon by James Duane Doty.

AGREEMENT WITH TAVERN KEEPERS.

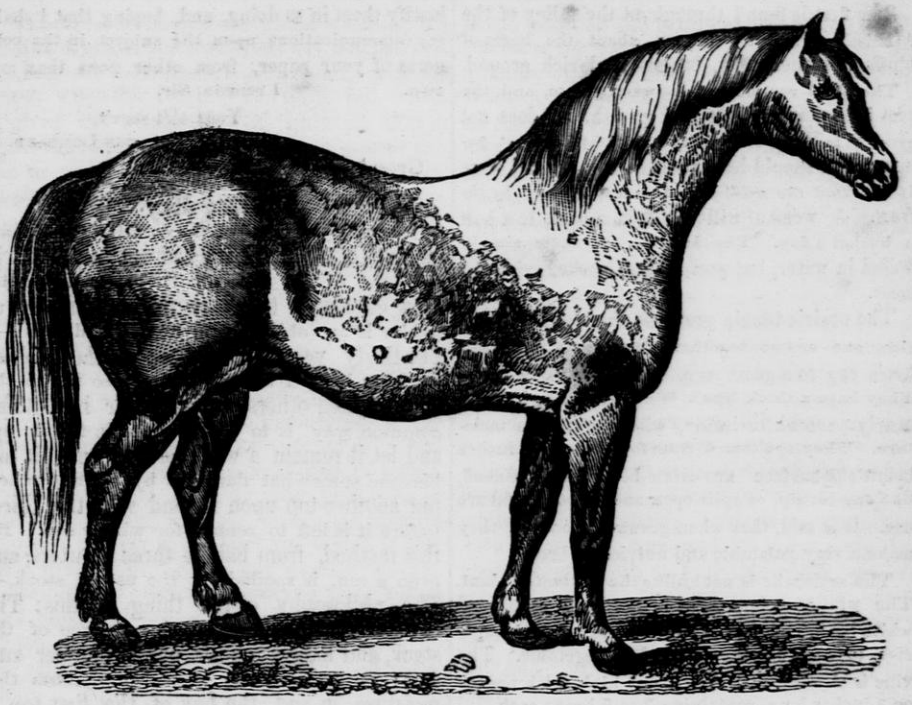
The subscribers, proprietors of public houses in the city of Milwaukee, pledge ourselves to the Wisconsin State Agricultural Society, and to the public, that we will not charge for board and lodging per day, during the week of the Fair, to be held in October next, more than the amount set opposite our respective names.

Milwaukee, Feb. 22, 1852.

Button & Sexton, United States Hotel,	$1 50
Pease & Mather, City Hotel,	1 50
P. Kane & Sons, American House,	1 00
Russel Wheeler, Milwaukee House,	1 00
Wm. H. Perry, Cold Spring House,	1 00
John McD. Smith, Baltic House,	75
Henderson & Brewersdorff, Tremont House,	75
A. McCormick, Key Stone State Hotel,	75
D. N. Neiman, Menominee Hotel,	75

Wonders in the Papers.

A bug, or insect, resembling a wasp, was found buried for twelve years in wood in England. The papers have announced this wonder. But the fact is not uncommon or very wonderful. The insect is the well-known Tonthedro, or Borer, which deposits its eggs under the bark of trees or even into the sap wood. The wood occasionally grows over the egg, and thus remains for successive years, before the insect is hatched or eats out. When the son of Gen. Putnam resided in Williamstown, Mass., he had two tables made of apple-tree timber, from a large tree cut down by Gen. Putnam, on his farm in Pomfret, Connecticut. Three of these Tonthedro ate out in two or three years. It was evident, from the number of consecutive layers of wood that the eggs had been deposited at least *seventy years* before the insects came forth to the light. In the splitting of maple wood, I have known a full grown Tonthedro brought to light, deep in the wood, where its egg must have been deposited many years before. The facts only show the long time which the egg will retain the principle of life before the maturing process shall come on. The world is full of such facts. Wheat has been known to germinate after being preserved a thousand years. [Rochester Democrat.



The English Cart Horse.

The above engraving of the English Cart Horse, we copy from Colman's European Agriculture. The cut is un-accompanied by any description or remark; except, that this animal received the first prize of the Royal Agricultural Society, at Derby in 1843.—His form would indicate great compactness, strength and hardiness—points which are indispensable in a good draft-horse.

For the Wisconsin & Iowa Farmer.

What shall be the Substitute for Potatoes?

Mr. Editor:—The potato disease, which has made such havoc in this country and in Europe, during the last few years, renders it indispensably necessary for us to rely upon some other vegetable as a substitute for the the potato, which has for so long a period, crowned the tables of prince and plebian. To what source shall we look for that substitute? Shall we look for it among the vegetables now known and cultivated by the Anglo-American race; or in the catalogue of wild vegetables known only to the red man of the forest, and again become indebted to him for one of our staple articles of food? The latter seems to be the alternative. The potato which we now cultivate, was, in its wild state, bitter and unpalatable. The indolent races of a tropical climate, in which it abounded, when discovered by the Europeans, but partially knew its use. Its uses have so multiplied, and its importance so magnified, that civilization seems determined to cling to it, while a vestige of its natural qualities remains.

No plant in the cultivated vegetable kingdom has insinuated itself so thoroughly into every vein and avenue of society, as the potato. From America it has crossed the Atlantic to the shores of Europe, and, for aught I know, is now flourishing in the cultivated fields of the Chinese Empire. If then, we must abandon the potato to the ravages of disease, let us look around for a substitute, and, if we should arrive at the conclusion that we must obtain that substitute from the forest, let us examine the forest of the north, where we may find plants which will not be injured by our endeavors to acclimate them.

Philander Prescott, Esq., Superintendent of farming for the Sioux, under date of 10th Nov. 1849, writes in substance, as follows, to the Commissioner of Patents, viz: Of wild roots there are several kinds that the Indians dig for food, when other food is exhausted.

1st, *Mendo*, or wild sweet potato;
2d, *Tip-sui-ah*, or wild prairie turnip;
3d, *Pang-he*, or artichoke;
4th, *Omen-e-chah*, or wild bean.

The first is found throughout the valley of the Mississippi and St. Peters, about the bases of bluffs, in rather moist, but soft and rich ground.

The plant resembles the sweet potato, and the root is similar in taste and growth. It does not grow so large or long as the cultivated sweet potato, but, I should have thought it the same, were it not, *that the wild potato is not affected by the frost.* A woman will dig from a peck to a half a bushel a day. The Indians eat them simply boiled in water, but prefer them cooked with fat meat.

The prairie turnip grows on the high, dry prairies, one or two together, in size from a small hen's egg to a goose egg, and of the same form. They have a thick black or brown bark, but are nearly pure white inside, with very little moisture. They are found from four to eight inches below the surface are eaten boiled and mashed, like our turnip, or split open and dried for future use. It is said, that when ground into flour, they make a very palatable and nutricious bread.

The artichoke is not unlike the cultivated plant. The wild bean is the size of the large cultivated white bean, rich and pleasant in flavor, and superior to any cultivated garden vegetable. The vine is slender, from 2 to 4 feet high, with pods 2 or 3 inches long, containing 3 to 5 beans each.

Mr. Prescott speaks of a swamp potato, found in mud and water 3 feet deep. The root is slightly pungent, and not disagreeable, eaten with salt or meat. I have mentioned those plants only, which I deem most important among those named by Mr. Prescott; and, for particulars, would refer the reader to the Patent Office Report, (Agricultural) for 1849 and '50, page 451, where he will find the communication above spoken of. The officers of our State Agricultural Society are the guardians of our agricultural prosperity. Would it be improper for me here to suggest to them the propriety and expediency of their obtaining some of those wild roots, and to be by them distributed among the different societies, to be presented as premiums at their annual fairs?

If the wild potato, of which Mr. Prescott speaks, is not affected by frost, it is certainly well adapted to Northern Wisconsin; and if susceptible of improvement by cultivation, as the potato, now in use, has been improved, it would be a valuable acquisition to every portion of civilized society.—I hope immediate measures will be adopted to introduce them into this State; and, as one article of food is cut off by disease or otherwise, another may be found to fill its place. Feeling assured that measures will be adopted for the introduction of the wild roots spoken of, if, in the opinion of the officers of the State Agricultural Society, the the matter should seem of sufficient importance to justify them in so doing, and, hoping that I shall see communications upon the subject in the columns of your paper, from other pens than my own.

I remain, Sir,
Your ob't serv't,
SOLOMON LOMBARD.

Greenbush, Wis., May 29th, '52.

Stacking Hay.

In many portions of the country more than one half of the hay is stacked out; especially is this true of the newer portions of this state. Now effectually to secure this vast amount of fodder is an object greatly to be desired.—For thirty years I have been in the habit of stacking hay. I have observed also the method by which others put up their hay. The common way is to build a stack, top it up, and let it remain a week or two, until it has become somewhat flattened by settling; then put another top upon it, and still, the third, before it is left to remain for winter use. By this method, from half to three quarters, and even a ton, is spoiled for the use of stock.—The philosophy of the thing is this: The sweat of the hay rises to the surface of the stack, and lodges on the outer or upper surface; putting on the second top shuts this moisture in and the hay of the first top is spoiled in consequence of it. The second top is spoiled by its exposure to the weather; thus a double loss is sustained by the overcareful farmer to protect his hay. My method is to make but one top. If the weather is fair, build the stack to the shoulders, (that is, to the point where the top begins to form,) let it remain a day or two to settle, then finish up the stack; a little swamp is best for the top. When built in this way, I have found on removing the first lock in winter, the hay below as bright as when it was first put up. If there is a prospect of storm, some boards may be placed on the stack so as to protect it while it is being settled, as farmers say. If no boards are to be had, and bad weather is at hand, top up your stack; or, if you get a tolerably fair top, never touch it again; if not, throw off your whole top when the weather is fair, and finish your stack. In this way, you need not have any hay injured in the least, only just so much as is exposed to the weather. R. R.

Doll. Newspaper.

Rust or Mildew in Wheat.

A correspondent of the Boston Cultivator, D. L. Harvey, of Epping, N. H., furnishes the following remarks relative to the rust or mildew on wheat. His theory appears to be supported by facts, and corresponds very nearly with that advanced by a correspondent in the second volume of the Maine Farner.

"The rust or mildew on wheat is caused by a light drought and a sudden rain, and the sun coming out hot immediately after, without wind, when the berry is two thirds-full, when it gives the wheat such an impetus, that it splits the stalk of the grain, which causes the sap to ooze out, and finally stops the growth of the berry. After this takes place, any person will notice that the spots on the stalk are all lengthwise of the stalk, and by taking a sharp knife, he will find that the stalk is split open. Now the grain must be about two-thirds full to have this take place, and at no other stage of its growth.

We believe that manuring with new, unrotted manure will increase the evil, because it begins to work when the grain needs it the least, in the hot, sultry weather of July and August. It is sure for a good crop of wheat, to well dress the land the year previous, or dress that spring with old, well rotted manure and sow as soon as the land will admit, if possible, to avoid all the dog day weather we can. I have known forward pieces to yield a first rate crop, and others on an adjoining farm, which were sown later, to be worthless, on the same kind of soil, with equally good treatment.

The red bearded Black Sea wheat is more hardy against the rust or straw split than most other varieties, and ripens some days earlier. I obtained more bushels of wheat on the same kind of land last year, than I did of barley from the same amount of seed, though quite a light crop. This, Mr. Editor, is my humble opinion, after fifteen years of close observation on the subject. A slight rain is highly dangerous to a crop of wheat, after it begins to turn for ripening."

Maine Farmer.

The using of Paint.

It is not an uncommon thing for some paints, especially when exposed to the atmosphere, to rub off like whitewash, after they have been put on for about six or eight months. We have known white paint to do this, although the oil and white lead were said to be good. In respect to white paint, which is most extensively used, there are three things which may be the cause of its inferiority and rubbing off. These are bad oil, bad lead, and too much turpentine. The best linseed oil only should be used, and it should be boiled, but not too long nor at too great a heat. Linseed oil is frequently adulterated with sunflower oil, which is very inferior to that of linseed.

Some white lead is sold which is very inferior to others, but painters know not how to judge between the good and bad. The best can be easily ascertained by painters from the quantity of oil required to give it proper consistency. In mixing paints, there should be no turpentine at all used for outside work (at most, the smallest possible quantity) because the turpentine makes a soap of the oil, consequently, it soon will rub off or be washed away by storms, &c. The only benefit of boiling linseed oil is to drive away its moisture and ammonia, so that the gluten of the oil will form a beautiful skin of varnish, when dry, to protect the lead from the effects of the atmosphere, while turpentine forms a good varnish with resins and gums, its combination with oil is altogether different, forming a soap, hence those who know not this fact, and use too much turpentine with their paints for outside work, may expect to see it disappear before it is very old. The best way to put on white lead for outside work, is to commence with a very thin coat and let it dry perfectly. It is better to put on four thin coats, one after another, than two thick ones. The labor, to be sure, is more expensive, but those who buy their own paint, and use it in the country, will find out that it will be a saving in the end.

Scientific American.

To protect Sheep from Dogs. The general evil of dogs, which I see is at present, claiming the most stringent legislation in our Northern States to protect the sheep, likewise exists with us. Our own legislature has done much, and will do more no doubt, at the proper time to eradicate the evil. In the mean time, let me publish to the sheep raising world a remedy against the destruction by dogs, which was given to me by a highly respectable and valued friend, himself an extensive wool grower. It consists simply in placing on one sheep in every ten of the flock a bell of the usual size for sheep. The reasoning of my friend is this: the instinct of the dog prompts him to do all his acts in a sly stealthy manner; his attacks upon sheep are most frequently made at night while they are at rest, and the sudden and simultaneous jingling of all the bells, strikes terror to the dogs; they turn tails and leave the sheep, fearing the noise of the bells will lead to their exposure. The ratio of bells might be made to vary according to the size of the flock.

Richmond Whig.

Population of Baltimore.—Baltimore contains a population, according to the new census, of 169,812. Of the whole number, only 3,134 are slaves. In 1840, the number of slaves was 3,199.

HORTICULTURE.

Brief Horticultural Notes—No. 7.

BY JOHN A. KENNICOTT, M. D.

Very old orchards sometimes require a little heading-in, to re-induce fruitfulness—and all over the west on neglected trees, and especially those in wet soil, the SCALY-APHIS, or BARK-LOUSE, is either *the cause* or the effect of premature old age in the apple.—These scabby, scaly, fixed pests, are seldom found on young and healthy trees, though by close inspection, a few may be seen, and one soon becomes an hundred millions.

When the branches are entirely encrusted with the inseasible shells which cover these insects, and washing in soft soap or lye, or scraping every limb, is no longer practicable, *then*, perhaps, comes a case for the use of the saw and pruning-knife, as unsparingly as any orchardist, reared among frosts and fogs, could desire. If you cannot remove these loathsome uncreeping things, (though they do walk lively, for a few days after hatching) by the free use of soft soap and hard brushes, or strong lye, (equal to one lb. of potash to the gallon of water—or twice as much *soda*, which is better,) then try heading-in, first, and immediately scrape and wash the stumps left, very thoroughly,—though not so as to wound the bark,—and see that the wounds made by the amputations, are well covered with the Shell-lac, before you quit.

I would advise doing this in autumn, as soon as the leaves begin to fall, or early in April—and I would go over the trees, at least three times, touching over with the varnish, where cracked—a very thin coat is best—and giving the lice the benefit of a little more alkali before the leaves start, and, above all, plow up and fork,—drain and manure, and give your stumps a chance to grow into trees, and grow away from the Bark-louse.

I did not mean to come upon insects and enemies, just now, but this thing came in with the pruning, and so I have given you a chapter on the Scaly-aphis. By the way, if you could get the soap or soda-wash upon the scabby arab, 1st of June, you would "his quietus make"—for he is out of his house, during the warm days of early summer, and "as lively as a cricket"—and, for a month or two, his shell is as soft as a crab's that has just left his. But the trouble is, in killing the aphis, we kill the foliage too, after that has opened, if we dose him with potash or soda. But you *must* kill the lice or they will kill your trees—at least, that seems to be the general opinion, hereaway. I would advise every man who plants an orchard, to purchase BARRY'S FRUIT GAEDEN, and some other work on fruit trees. J. J. Thomas has a new edition in press, which may be noticed in the Farmer; and it is understood, that F. R. Elliott, is preparing a Fruit Book, expressly for the North West.

But I must close, after saying one word on pruning the PEACH and CHERRY.

These should be shortened in, early in March, if the weather is warm, or as early in the spring as the season will permit. Cut away half, or more, of the new wood, according to the growth—for you want a close compact head,—and *shade from the ground up*. The fewer of the direct rays of the sun, that strike the bodies and large branches, the safer and the more productive will be your trees, other things being equal.

The Grove, Ill., July, '52.

Number 8.

ANOTHER SHORT CHAPTER ON PRUNING—

The last numbers were sent off in haste, and it is feared that too little was said on the general principles which govern the pruning of fruit trees—a word or two more, therefore, at the risk of repetition.

We have said that very little pruning is necessary in this climate, compared with the moister and cooler regions of Great Britain and much of the Continent of Europe; and yet, there is a good deal of work for the knife, and often more for the thumb and forefinger of the skillful operator.

We said too, if I remember, that autumn is, perhaps, the best time to remove large branches, when such removal becomes neces-

sary from any accidental cause ; and that early spring—say the month of March, as a general rule—though the last of February, in early seasons, and the first of April in late ones will often answer for the region to which we particularly direct our hints, and desultory instructions.

The point is, not to commence pruning until the danger from hard freezing has passed by, and to finish before the sap has started, or the buds have begun to swell.—Cuts made in freezing weather, or followed by severe frosts, and those made after the buds have swollen, seldom heal as kindly as they would have done if made at the proper time.

These points being understood, the next thing in this connection, is the study of *varieties*. It will be found that the habits of growth and fructification are very unlike in the numerous varieties of the same species of fruit. One sort sends up a naked stem to a very inconvenient height, and when branches do appear, they are scanty, and bare as the body of the tree—another kind of the same fruit will push out long straggling shoots,—few or many, according to its nature—and at all heights from the ground, at all angles with the stem—Then, again, you will find trees with a dense top of brush, or a net work of wiry twigs ; and occasionally one will appear with an abundance of blunt spur-like branches, or a few thick angular ones, like the horns of a buck—and, of course, all these require very different prunings, and very unlike that which you give the great majority of your trees, with tall or short stems, but regular pyramidal or graceful rounded heads.

Now, it is very easy to direct the operation of pruning in some of these cases, and very difficult in others. One thing should always be borne in mind—*that you make no cut without an object*, for every particle of wood removed will have its due weight in determining the after growth of the tree.

If in the first case given, the nurseryman had pinched off the leading shoot of your tall naked tree at the proper height, during its summer growth, you would not be compelled to shorten it with the knife, at planting, and then cut back the side shoots as they appear until the base of a proper head is formed.—In the second instance, however, (and indeed, in most of the others) you will have to follow up what the nurseryman has only commenced—and in order to do this successfully, you must take lessons in the art from books, and let care and skill, and judgment direct the practice of the art, as a part of the science of horticulture, and not as a mere mechanical operation.

The skillful surgeon removes a limb and heals the stump—the thoughtful and scientific one saves it, if he can do so without risk to the whole system. In horticulture, the principle and action are in a measure reversed—and the question often is, how much and what ought we to lop off, to render the whole system more perfect and enduring.

Fortunately, at this day, Books describing the process, and giving the principles upon which rest all the necessary amputations in the garden and orchard, are cheap and abundant; a dollar, or $1, 25 will purchase Thomas' "Fruit Culturist," or "Barry's Fruit Garden," and I confess, that part of my object in saying so much, is to induce my readers to purchase one or both of these most valuable books. But before I close this lengthened chapter, I will say one word on *Summer pruning*. This is practiced from June to Sept., according to season, the subject, or the object in view. It is performed with the thumb and finger, and consists in pinching off the soft extremity of the shoots you wish to stop. It is done much more easily than cutting ripe wood, and heals very readily, and saves much waste of substance; as little, is removed, and that little in an immature state. And it is, besides, the very best process to induce early fruitfulness, though it is somewhat difficult to practice it, except on Dwarfs, or low half-standard trees.

The principle upon which summer pruning operates in causing early fruitfulness, is the same as in the other modes, which we intend to give hereafter. The wood system, or over luxuriance, is checked, and the fruit system, or fruit buds developed—this being the natural consequence of diverting the sap and retarding the growth—fruit buds being only

stunted leaf buds, or leaf buds checked, in their tendency to form branches, instead of develope flowers.

Number 9.

Enemies, Diseases &c.

And first of Insects. We incidentally mentioned the Bark Louse, or Scaly Aphis, in a recent number. The Green Aphis, or common plant louse, is sometimes very troublesome on fruit trees. And, perhaps, in the orchard, the plan recommended recently by Dr. Mygatt of Mc Henry Co. Ill., is the best, and certainly the cheapest. Boil one pound of Quassia in six gallons of water, and when cool, let an assistant carry a broad vessel, half filled with the decoction, and bend down and immerse the affected twigs—giving them some motion to insure wetting all the lice. I am not, (very unfortunately) an Entomologist.—But we have, from necessity, been attentive observers of the insects injurious to the Garden and Orchard.

The various Caterpillars constitute a very common and destructive class. I have seen the large eastern caterpillar on our imported trees, but the one most common here is a native, and is found on forest as well as on fruit trees. He is found from June to September, inclusive. Whether the perfect insects of this species lay their eggs in a compact ring around the small twigs like the eastern one, I am not certain, though I think they do. If any of these annular clusters of eggs are discovered the twig should be cut off and burned.

These caterpillars spin a conspicuous web which they enlarge with their growth, and commit their devastations within its protection; eating away all but the skeleton of the leaf, and destroying even the bark of small trees, when they have used up the foliage. They often include several contiguous branches in one web; and when (as I have often seen) half a dozen of these gauzy nests are found on nearly every tree in an orchard; the whole thing is ghost-like and disgusting in the extreme, and if not remedied you lose the fruit crop, if any, and very possibly some of the trees too, if long neglected, and frequently attacked. Fortunately these pests do not appear every summer, and when they are abundant you may easily rid your trees of them, by hand stripping; or if that is too revolting a battle; a brush on the end of a stick, or some such contrivance on the end of a pole of proper length, may be thrust into the nest, and the whole colony brought down by carefully twisting them up in their own web.—Take a time when they are not feeding, for this operation, and always effectually destroy all the worms when you have them at command. The earlier you attack these caterpillars the better.

There is a large red-headed worm, probably a caterpillar—though I have never seen any web—that eats the entire leaf, except the foot-talk: These are not so readily removed on large trees; but as they move in herds, you may crush them by hand or shake them off into some reciever. These worms drop readily, otherwise you might cut off the small branch upon which the whole herd always congregates. They are not very common but eat all clean where they go.

We have no Canker Worms in the west. I once mistook the above insect for this eastern pest.

Next to the bark louse of all insects visible to the naked eye, the *Apple Tree Borer* is the great enemy of the Apple, Quince and Pear. There are doubtless, several sorts of this insect. Eastern writers tell you that they attack near the base of the trunk; or if much above the ground, at, or near the fork of a branch—but not so here. I have cut out thousands of them, and never found one near the collar of the tree; and not a dozen trees in all, I think where the grubs were not at least one foot above the surface of the ground—generally from three to 6 or 8 feet, in our trees, of from five, to fifteen or twenty years old. Our sort is found in the native thorn, and other trees. I have found him in the *Pear,* but not so frequently as in the Apple and Quince.

Our grub remains in the tree about three or four years—certainly three, in general—though I have sometimes thought he came out prefect, in two years; and perhaps some of them do. He never enters the solid *wood* the first season. You will learn to discover

his whereabouts by a little practice, and a quick eye for any little slit, rough hole, or discolored spot in the bark. You will almost always find at least two or three grubs in each nest. Seek them from September to May, of their *first* year—after they enter the wood you need not try to follow them, except with a flexible wire; but you may give them a bit of camphor, or a squirt of Spirits of Turpentine, or tobacco-water from the nose of a very small syringe, and then plug them in with grafting wax. You can find their holes by their chips, or excrement, when they have entered the tree. They are not so bad in the prairie, as near timber. You had best combat the Borer in the perfect state, however. They come out a perfect Beetle (*Saperda*) about the first to last of June, according to season ; perhaps sometimes in May. If the trees are washed with whale oil, or even common soft soap, diluted with tobacco water; and say one pound of sulphur to every gallon of the soap,—the Beetle will not deposit her eggs on trees thus treated. This wash should be applied the last of May, and again in June, would perhaps be a good plan. All insects dislike whale-oil soap, and alkalies, and most of them sulphur, also.

For the Wisconsin & Iowa Farmer

Trees and Insects.

Mr. Editor:—The month of June was unusually trying to newly transplanted trees; especially those whose roots were buried in the ground in the hasty manner quite too common among our farmers.

Those who have mulched in accordance with instructions of the Agricultural and Horticultural press of the day, have doubtless the satisfaction of seeing their trees covered with foliage ; and in condition to profit by the copious showers which July has ushered, along with its advent. Some who have lost their trees will be able to learn a practical lesson for future use, in the flourishing condition of mulched trees at this time.

A very vicious practice, that of pinching off all the shoots which appear on the trunks of young orchard trees, needs correction. These shoots are essential to the health and vigor of the tree. Try the pruning process two years on an *Oak*, standing in open ground; then cut it down and mark the diminished growth, as shown by the width of the outside circles.—Fruit trees will have their own way nearly, after the experiment is tried; unless the organ of destructiveness is very large in the experimenter.

The *Web Caterpillar*, or "Tent Maker," should be looked for and destroyed from all fruit trees; dry leaves inclosed in a web, indicate his presence. A voracious tri-colored worm must be looked for and destroyed in August. These last are a red collared, uncouth looking, hump backed, greedy rascal.; and a colony or family, will entirely defoliate a small tree in a few days; demolishing the entire foliage and part of the foot-stalk of the leaves as they progress. They make no web, and are apt to drop to the ground on being disturbed. New colonies make their appearance during the entire month. I have not found any description of them in the books, nor have I seen them, out of this vicinity; but suppose they are common in the West—North West at least.

Aztalan, July 13th. J. C. Brayton.

For the Wisconsin & Iowa Farmer.

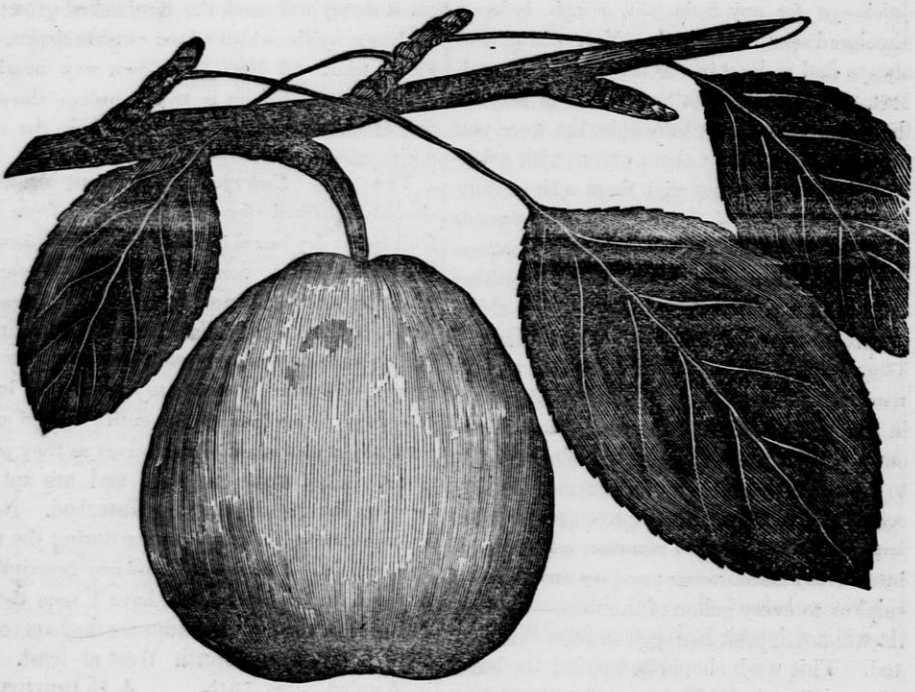
Grease on Trees—The Almond.

Friend Miller:—In your July Number of the Farmer, I observe a letter from your old and esteemed correspondent, (Solomon Lombard) whom I, with your other readers, would be pleased to hear from much oftener. But he will pardon me for cautioning him, against the use of grease on the bodies of his fruit trees. He may see no bad effects from it the first year; but all oily matters are very apt to *kill* fruit trees, when liberally applied. No doubt that rancid grease, as well as coal-tar &c. will protect trees against some of their enemies. But the remedy has been found, a dangerous one.

I hope Mr Richardson will give us a chapter or two on insect enemies. The soft shelled Almond is too tender for this region. The hard shell succeeds.

Yours, J. A. Kennitcott.

It is said that carrots are worth as much, per bushel, as oats, for horses, with dry food—feeding alternately, one day with carrots and one day with oats.



Buffum Pear.

The Buffum Pear, a representation of which we give above, is esteemed one of the best now grown. The New Egland Farmer, in noticing it, says:

"This pear was raised by Mr. David Buffum, of Newport, R. I., from the seed of the St. Michael. It resembles its parent in quality when it comes to its highest state of perfection. The Buffum is distinguished for great growth, production and hardiness, and is one of the very best pears for general orchard culture. Though the quality varies almost from first to second rate, it is a handsome pear, generally of good quality, and sells well in the market.

This pear is of an upright growth, and it forms a very beautiful tree. It often bears so abundantly, that it is necessary to reduce the fruit one-half by thinning, and then it will yield a large crop. As the foreign pears of high quality are very delicate, and often fail, it would be well for cultivators to turn their attention more to our native hard varieties, on which we may rely for a crop. It may be well for ameteurs to cultivate their hundreds of varieties of delicate foreign pears, as they have time and money to spend in this way to gratify their tastes, and if they do not get half fruit enough for their own use, others need not complain; but the cultivator who raises fruit for profit, will find it for his advantage to prefer our best native varieties generally.

The size of the Buffum pear is medial; the form long-obovate, the color yellow, with specks and patches of red and russet in the sun; the stem short and thick, in a slight cavity; calyx small, open, in a small basin; flesh white, melting, tender, juicy, with a fine spicy flavor. Ripens in October."

Culture of the Peach from Seed.

Mr. Editor:—In answer to your correspondent who inquires how the seed of the peach is preserved during the winter—and in what way cultivated? I would say, I was present at Mr. Philip Reybold, Jr.'s, of Del., planting, some time since, and learned his mode of proceeding, by which he is accustomed to raise from 50 to 60,000 trees annually, budding them in the succeeding autumn. He prepares a corner of his orchard by plowing and fencing it very carefully from the depredations of stock, and on the pulverized surface scatters his peach pits, to the amount of many bushels, covering them slightly with the loose earth, and leaving them exposed to the frosts and snows, and freezings of the

whole winter; and when on examination in the spring, he finds them sprouting and bursting their shells, he selects them carefully, placing those that have so sprouted, in baskets by themselves, and those pits that have not opened, into other baskets, planting the former in long drills made by the plow, in his nursery, at the distance of about 4 inches apart, covering them slightly with pulverized earth; after which, the remainder of the pits are sown in the same kind of drills, the rows 4 or 5 feet apart. Here they are kept perfectly clean during the whole summer, by the hand-hoe, budded as has been said, in the autumn, when some of them have attained the height of six feet or even more, and cut over close to to the bud the next spring; after which, and by the time of taking up the next autumn, they will have attained another height of six or eight feet, making a whole growth of from 12 to 14 feet, in about seventeen months! At this season of the year he also sows his apple pips, which he obtains in large quantities from the cider mills, with the seeds of pears and the pits of other fruits, and I know of no one more careful in the culture, or more to be depended upon in the selection of trees for planting, which I have reason to know will come true to character. Now is the time to collect peach pits, and it is no more trouble to sow one thousand, than one hundred.

Boston Cultivator.

Mode of Destroying Worms on Trees.

A correspondent of the National Intelligencer says, that a decoction of tobacco thrown among the branches and foliage of trees infested by worms, is a sure way of destroying them. It has been tried at Washington on lindens, by Mr. Ranahan, keeper of the grounds of the war and navy department, and by the commissioner of public buildings, on four large elms at the foot of the steps of the capitol, in both cases with good effect. We copy directions for the application of the decoction, objecting, however to the rinsing of the spittoons:

"As some difficulty may arise in the minds of many as to the precise time of throwing on the tobacco-juice, I will give them an infallible rule, viz: As soon as the leaves are well developed, they will be found to be perforated with small holes. This is produced by a bug, which feeds on the leaf, until it becomes a fly, and then deposits its eggs in a straight line, about an inch long, on the under side of the leaf. If the decoction be thrown on immediately, it will drive the bug entirely away; or if any eggs have been laid it will destroy them completely.

As a second crop of worms will be produced on trees which are neglected, it will be necessary about that time to give them another sprinkling. If this course be adopted by all interested, I have no hesitation in saying that in two years time the worms will be entirely exterminated.

"The expense is inconsiderable; half a barrel full of the decoction, which can be made out of refuse tobacco, or the washing of spittoons, in our public offices, will be sufficient for a large tree."

Medicinal Qualities of the Grape.

The New York Commercial, in an article on the grape, says this fruit is one of the best and most wholesome of medicines. This affords an additional inducement for the culture of this popular fruit. The Commercial says:

"In the vineyard districts of France, Spain and other vine growing countries, the medicinal properties of the grape are well known and highly prized. The free use of this fruit, as we are advised, has a most salutary effect upon the animal system, diluting the blood, removing obstructions in the liver, kidneys, spleen, and other important organs, giving a healthy tone and vigor to the circulation, and generally augmenting the strength of the entire animal economy. In diseases of the liver, and especially in the monster compound affliction, dyspepsia, the salutary and potent influence of a 'grape diet,' is well known in France. The inhabitants of the vineyard districts are never afflicted with these diseases; which fact, however, alone would not be conclusive evidence of the medicinal qualities of the fruit of which they freely partake, since peasant life is rarely marred with this class of ailments; but hundreds who are thus afflicted yearly, resort to the vineyard district for what is known as the 'grape cure,' and the result proves to be a cure, except in very long, protracted, and inveterate cases, which are beyond the reach of medicinal remedies.—The invigorating influence of the ripe grape, freely eaten, upon the feeble and debilitated, is very apparent, supplying vigor and the rose hue of health in the stead of weakness and pallor, and this by its diluting property, which enables the blood to circulate in the remoter vessels of the skin, which before, received only the serous or watery particles.

"In these remarks, however, we must be understood as speaking of the fruit when perfectly ripe. Unripe grapes, like all unripe fruits, are detrimental to health, and derange the digestive organs, and those depending upon, and sympathizing with them."

Feeding Horses on the Road.

There is no one thing in which farmers manage their stock so badly, as in feeding horses too frequently in travelling. Some will bait their horses every ten or twelve miles, though they may not be more than an hour and a half or two hours in going from one stage to the other, and this is often done soon after the horse has eaten a hearty breakfast or dinner ; when the horse stops he is usually fatigued or hot, and he needs resting or cooling ; to fill the stomach then with food, before the previous meal is digested, is injurious in the extreme ; let the horse be well fed in the morning before he starts on a journey, and he will travel from seven to twelve without requiring any food ; then let him rest two hours at noon, and he will be prepared to travel again till seven without baiting. Horses that labor on the farm, work half a day without eating. In and around cities are thousands of horses that work hard during the forenoon and afternoon without baiting, and yet they are kept in good condition, though at work almost every day in the year : they are employed in trucking, in cabs, in omnibusses and other vehicles, and they usually labor hard ; although these horses are frequently under the best of management, no one thinks of giving them a baiting between their regular meals.

The following article of Dr. J. V. C. Smith, shows the management of horses in the east, in this respect :—

" Barns are not required in Syria, no hay even being cut or in demand—cattle, goats, sheep, &c., having excellent food the year round. Horses are far better managed in Syria than in England or the United States, more spirited, and endure the severest kind of of fatigue better in Europe, or our own best of countries. The system of feeding, which is uniform throughout the east, is to give them fine straw, broken up by pounding, analagous to being cut. It is put into a small bag, containing perhaps a peck, mixed with four quarts of barley, or beans if preferred.—When put up for the night, the bail of the bag containing their supper is slipped over their ears, and they are left to make their meal and then have a regular night's sleep.—Early in the morning the mess is repeated, nothing more being given them ; in fact, the the article of hay is not known. I have ridden one horse twenty days—often ten hours at a time—without ever stopping to bait.

" To such cuseom as luncheon for borses is recognized. Night and morning are the meal times for them, for donkeys, mules and camels.

" Their endurance under immense loads, day after day, sure footedness and vivacity, are extraordinary, and a theme of admiration. One month in a year, June, they are turned out leisurely to grass, and then the dry straw and provender is invariably resumed. In this connection it may be mentioned that in shoeing horses, the people of the Orient are far in advance of us. The shoe is a thin piece of iron plate, covering the entire under surface of the hoof, except a small oval hole for the exit of the frog, which is pressed through and recovers its position by an elastic movement when the foot is raised. The shoe, therefore, is not a burden, but a genuine protection, vastly better than ours of a pound weight each. [N. E. Farmer.

Great Calf.

LEWISTON, April 8th, 1852.

M. C. RICHARDSON, ESQ.—Dear Sir : You have doubtless seen the letter I wrote some time since to the editor of the Rural New Yorker, concerning the extraordinary calf owned by Mr. J. M. Buttery, of Lewiston, N. Y., and you may have also seen the account of the butter made from the milk of the same calf, a sample of which I have lately shown some of the Buffalo editors, who gave their opinions in regard to the case ; but I have been earnestly requested to write upon the same subject, simply to gratify the inquiries of public curiosity.

It was but yesterday that I took some notes of the matter, which I will hastily give, and ask you to give publicity to, so that the public will be contented as to the correctness of the statements already extant.

The calf was ten months old the 15th of last month—is of rather more than usual size for that age ; stands 3 feet 9 inches in height; measures or girths 5 feet 1 inch ; measures 5 feet 6 inches from the horns to the extremity of the hips, and will probably weigh at this time, (and I will reckon it low, so as to be correct,) about 400 lbs. She is a cross of the Durham and Devonshire, well formed and of beautiful appearance.

When but two months of age it was discovered she had quite an udder, and by trial, found that she gave milk. From that time to the present she has not failed to afford from one pint to a quart of as rich and flavorous milk as any good dairy cow affords at a mess, and *now* it is necessary to milk her regularly twice a day. After good spring pasturage is afforded her, doubtless she will give from eight to ten quarts per day. It is, indeed a strange " freak of nature," and is worthy of the notice of the curious and speculative.

In the letter of correspondence which I sent the Rural, I did openly and boldly challenge the world to compete with it, and I have examined many articles upon it, but have not yet seen any account of a case *so early in its developements*. I will take this opportunity to state to the incredulous and disbelieving, that I will pledge to substantiate the facts I have herein stated, as well as those I have at other times given rise to. I would also say, that I am well acquainted with the owner of said calf, seen said calf milked, seen, also, the quantity given at a milking, known that butter was made from the cream thereof, in quantities averaging from half a pound to two pounds, and that there can be no *humbug* in relation to all I state. I stand ready to answer all inquiries, or satisfy all objections, or even affirm to the validity of the whole affair.

W. H. Bristol.

Courier, Lockport, N. Y.

Swamp Whortleberry. — The Swamp Whortleberry is susceptible of easy and profitable cultivation in gardens. A gentleman residing in Wayne County, Michigan, says the *Bumont Chronicle*, has a tree growing in his garden which was transplanted from a marsh about ten years since. It occupies, at present, a position in a rich upland soil, and is about an inch and a half in diameter, The fruit which is considerably improved in size, is equal in flavor to that produced in swamps, and the yield is more abundant and certain. The smaller varieties of this excellent fruit, ordinarily found on the plain lands, and in openings, would doubtless well reward one for cultivating them, and prove as hardy and prolific as the cranberry, raspberry, and other wild fruits which yield so readily to the hand and wishes of the gardener, when removed to a cultivated soil.

Fattening Properties of Peas and Beans. These articles have been found by chemical analysis, rich in nitrogen. The inference has been that they would be specially useful in supporting the waste of the muscles of the animals, and it has been suggested that they would be particularly useful in the production of wool. They are evidently valuable for the production of fat. Those persons who have used peas for fattening hogs, consider them worth as much as Indian corn. In districts where that grain is not readily grown, very fine pork is produced from peas. Dickson, in his work "On the breeding of Live Stock," states a sweepstakes was entered into between five East Lothian farmers, to be claimed by the one who should be pronounced the best feeder of cattle. Forty cattle of the same breed, and in equal condition, were divided between them, as fairly as possible. They were put up together the second week in September, and killed at Christmas following. The winner of the stakes fed his animals wholly on *boiled beans*, with hay.

Sulpher vs. Insects.

At a Legislative Agricultural Meeting in Maine, reported in the Maine Farmer, we find the following, which some of our readers may like to try:—

"The remedy, the gentleman said, first suggested itself to him from observing the effect which sulphur had when given to cows, when they returned from their ranges, as they frequently did in the southern states, covered with the peculiar wood-ticks which are found in the south. A dose of sulphur given to the cows at night, would, in a few hours, cause the ticks to fall off entirely dead. Taking the hint from this, the gentleman said, he bored into his fruit trees with a bit, taking care to bore through the *alburnum* or white wood, and into the incision thus made, he forced by means of a syringe, a quantity of sulphur, and then plugged up the hole with a plug made of white pine. He had effectually rid his trees of all destructive insects by this process, and had never known it to fail. His theory was, that the sulphur, combining with the acidulous sap of the tree, entered into its circulation. The insects by feeding on the tree where the sulphur had entered into its circulation, were destroyed. [Selected.

Indian Corn.—Indian corn contains about sixty per cent. of starch, nearly the same as oats. The proportion of oil and gum is large, about ten per cent.; this explains the fattening properties of Indian meal, so well known to practical men. There is besides these a good portion of sugar. The nitrogenous substances are also considerable in quantity, some twelve to sixteen per cent.

Sweet corn differs from all other varieties, containing only about eighteen per cent. of starch. The amount of sugar is, of course, very large, and the nitrogenous substance amounts to the very large proportion of twenty per cent.; of gum, from thirteen to fourteen; and of oil, to be about eleven. This from the above results, is one of the most nourishing crops known. If it can be made to yield as much per acre as the hardier varieties, it is well worth a trial on a large scale.

[Working Farmer.

On the 28th June, 650 German emigrants arrived in Chicago over the Michigan Central Railroad.

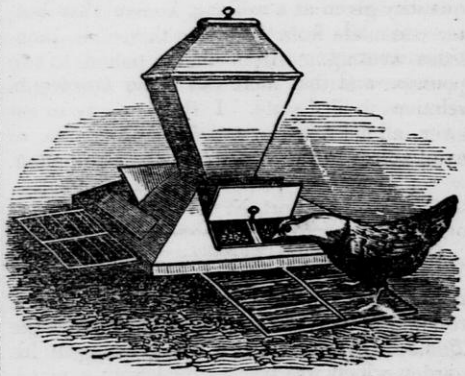
Utility of Birds and Snakes.

These are among the most useful of the farmer's aids, in securing his crops from insect depredations ; and yet manifest as this is to every observing man, they are frequently pursued and hunted from the premises as if they were his worst enemies. The martin, the swallow and the wren, which may almost be considered among the domestics of the farm; and the sparrow, the robin, the blue bird, the wood-pecker, bob-a-link, the thrush, the oriole, and nearly all the songsters of the field accomplish more for the destruction of noxious flies, worms and insects, which are the real enemies of the farmer, than all the nostrums ever invented. And hence the folly of that absurd custom of scare crows in the growing cornfields and orchards, to which I have alluded. The chickens and ducks do the farmer more benefit than injury in the garden and pleasure grounds, if kept out of the way while the young plants are coming up. A troup of young turkeys in the field, will destroy their weight in grass-hoppers every three days, during their prevalence in summer or autumn. A pair of sparrows, while feeding their young, consume over 3,000 caterpillars a week. One hundred crows devour a ton and a half of grubs and insects in one season. Even the hawk and the owl, the objects of general aversion, rid the fields and woods of innumerable squirrels, moles and field mice. The last are frequently great depredators upon the crops, after having exhausted the stores of worms and insects which they invariably devour, and to this extent these little quadrupeds are themselves benefactors. The smaller species of the hawk and owl, when pressed by hunger, will resort to grubs , beetles, crickets and grass-hoppers, in the absence of larger game. That loathsome monster the bat, in its hobgoblin flight, destroys his bulk of flies in a single night. Slight injury may occasionally be done to the grain and fruit by the smaller birds, and when thus intrusive, some temporary precaution will suffice to prevent much loss. But whatever loss may thus occur, the balance of benefit to the farmer from their presence, is generally in their favor; and instead of driving them from his grounds, he should encourage their social, visits by kind and gentle treatment, and by providing trees and pleasant shrubbery for their accommodation.

The *Toad,* apparently dull, squat, and of the soil's hue, whatever that may be; he sits quiet and meditative, yet watchful in the thick shade of some overgrown cabbage; and as the careless insects buzz by, or the grub or beetle crawl lazily along, unheedful of danger, he loads his aldermanic carcass with the savory repast. Sixteen fresh beetles, a pile equal to his fasting bulk, have been found in the stomach of a single toad.

The *striped snake* is a harmless object about the farm premises, and like the toad, he is a great gormandizer of worms and insects. The sole drawback to his merits, arises from his frequently feasting on the toad and frog.

Am. Farm Book.



Brown's Poultry Feeder.

The above engraving represents a poultry feeder which we contrived and made, and have had in use for the last year. One or two bushels of corn may be fed at once, and thus relieve the mind for weeks of that care. It has four sides, only two of which are represented in the cut, and they afford room for twenty fowls to feed at once. It may be partitioned inside so as to feed different kinds of grain at each opening. It is not well to mix different grains in the same apartment, as the fowls are quite likely to scatter it about; but where there is only a single kind in the apartment it is rare to find a grain on the floor about the feeder.—

Nothing more is necessary to teach the fowls to open it than to raise the doors half an inch, just so as to enable them to see the grain.

N. E. Farmer.

Wool. This is destined to be the leading staple of produce in Southern Wisconsin and Northern Illinois. Its advantages over wheat and the common products which have been relied upon, are beginning to be appreciated by the farming community. The price this week ranges from 25 to 37cts. From seven to ten thousand dollars will be paid out this week in this market for wool alone.

Kenosha Tel. of July, 2d.

The clip of wool this year, in Ohio, alone, is estimated at 14,000,000 of pounds.

Democracy of Science, No. 1.

BY JOSIAH HOLBROOK.

Consolidation and diffusion are two operations distinct and opposite. Both are witnessed in wealth, government, religion, knowledge, and nearly every thing human. However applied the one is despotic and the other democratic. The nature of man and the progress of society tend to consolidation instead of diffusion. The spirit of republicanism is to promote diffusion and put checks upon consolidation; and that, too, as connected with all the leading interests of human beings.

Democracy of science is the subject now under view. The true democracy of science is to "increase and diffuse knowledge among men"—the design of Smithson. This is also not only a great, but *the* great policy of national and State policy—not to consolidate but to diffuse knowledge interesting to all, especially farmers and mechanics, as they constitute more than seven-eighths of all civilized communities.

The developement and the application of the natural resources of our country stand first and foremost in furnishing that kind of knowledge interesting to all. It shows possessions and the modes of using them—strictly the "*use of talents.*" But with developement and application they may be diffusion; there may also be consolidation. It is one thing to have our mineral resources developed, and a knowledge of them so diffused that every farmer may know the capabilities of his own fields. It is quite another thing to have our country subjected to scientific exploration, however full and complete, and the result placed in ponderous volumes, and those volumes confined to the shelves of college and State libraries, to be little read and less understood. The one is diffusion, the other consolidation. The one is carrying out the purposes of scientific explorations and applying the knowledge obtained by them for the benefit of those who need it, and those who paid for it; the other is evidently a perversion of funds designed for diffusive knowledge, wealth, morals, and power, to personal pride and individual aggrandizement. The one tends to democracy, the other to despotism.

As the spirit of the age is the democracy of science—the diffusion, not the consolidation of knowledge—an attempt will be made to point out several subjects of science, with such plans and modes of promoting them as will tend to bring knowledge to every man's door, and to give to it free access to every farmer's son and every mechanics daughter. As the schools of our country constitute or ought to constitute not a "*national university*," but a "*university of the nation*," special endeavors will be made to present such subjects, plans, and modes, as will aid in training the young beings composing them for success in their future vocations; to put them on the track of "*practical science, productive industry, and christian morals.*"

Deep Plowing.

A farmer in this vicinity whilst plowing last fall, was asked by a neighbor who, although he had a large farm, could scarcely support his family off it, why he plowed so deep?

"Because, neighbor," he replied, "I plowed the same way last year, and year before, and I found I plowed a great deal of gold!"

"Gold!" exclaimed the amazed neighbor, "why, how much did you plow up?"

"Well, some hundreds of dollars a year—and I did it in this way; my crops were twice as large where I plowed as I now do, in the same fields where I formerly plowed to half the same depth, and they take less manure too."

"I dont believe a word of it," said the neighbor, disappointed in the gold digging. "If that is the way you plow up the gold, I am afraid you will never set the river on fire. I go for the good old way and find it the best. There is little to learn in farming which those before us did not know."

"Well, neighbor you may do as you like, but I have tried both ways, and I am more than satisfied with the result. Indeed, by strictly persevering in it and other improvements, I shall nearly or quite double my proffits, and all this excess I consider just so much gold plowed up in my fields."

"Ah," continued the neighbor, "I see from your notions that you are a book farmer, and belong to an agricultural society; but you'll find it wont pay in the long run, I think."

"There's where you are in error, my friend; I am no book farmer—I belong to no agricultural society, but I mean to join one at the earliest opportunity." Germantown Tel.

SINGULAR DISCOVERY.—We learn from a gentleman who came down on the Nominee, that a few days since, as Mr. L. W. Low, of Columbus, Iowa, was levelling down a small mound in his garden, he exhumed the skeleton of what was supposed to be an Indian, buried in a canoe. There were found with him a small looking-glass, a bead bag, and thirty one silver dollars, wrapped up in a silk handkerchief. The latest date of the coin was 1836. There was a hole in the skull through the forehead resembling that made by a bullett. Galena Adv.

EDITOR'S TABLE.

FARMER OFFICE.—Subscribers to the Farmer, who have heretofore received their papers through the Janesville Post Office, and who have no boxes, will hereafter receive them at the Book-store of Jouaneault, opposite the American. Mr J. is authorized to receive payment on subscr ip tions.

THE CROPS.

There never has been a season, within our recollection, when the prospects for an universally abundant harvest were more promising than the present. In some parts of the country there has been a superabundant fall of rain; and in other sections a protracted drouth has prevailed—The spring was cold, remarkably backward; and it was very late before seed of any kind was put into the ground, and much of the corn did not vegetate without planting a second time; but succeeding all these discouragements, from all quarters the crops taken as a whole, are represented as having never looked better than at the present time.

The preservation of both *winter and spring wheat* from rust, in Southern Wisconsin, we attribute more to the dryness of June and July, than to any peculiarity of the last winter, or improved method of cultivation over that of former years. The straw of wheat, barley and oats, is light, but the yield of kernel will be large. We never saw *Corn* improve more in the same length of time, than within the last twenty days. The reports in relation to *Flax*, (which is comparatively a new staple hereabouts,) are not so favorable as we could wish. That sown early, we are told, looks fair; but late sown pieces have suffered severely from the drouth—The straw stunted and short. *Potatoes* appear well as yet; but their present healthy appearance should not be regarded as any guarantee for a sound crop.—A warm drenching rain, or some atmospherical influcnce may destroy the whole crop in a few days.

The gleanings which we subjoin, indicate the state of the crops throughout our favored land.

The New Orleans Price Current says it has kept well posted up on the subject of the crops of Louisiana and the adjoining States, and that the crops of sugar, cotton and corn promise to be very fine.

In Northern Alabama, the wheat crop is said to be larger than has been known there for many years.

We have inquired within a few days of farmers from various parts of the county, and learn that the general prospect of crops is favorable. Winter wheat will be a short crop, spring, a full one; though the quantity sown waa light. Corn and oats excellent—Flax doing well. Grant Co. Herald.

The prospects of the wheat crop is universally represented as favorable. Ohio Farmer.

We are informed that none of the wheat in this vicinity is troubled with the rust; and is entirely out of the way of it. Wat. Chron.

It is to us very gratifying to hear from all sections of the country, the most hopeful and cheering accounts of the growing crops. Southern Cultivator.

We have met with a number of gentlemen from various parts of Northern Wisconsin, who tell but one story of the prospects of the crops. They never looked better. Winter wheat never looked better. Green Bay Adv.

Hereabouts we do not think there is any reason to boast of the condition of the grain or grass crops. We hope to have a passable crop of corn; but a large one is out of the question. Winter wheat looks quite well.—Spring grains promise a fair crop. Grass is decidedly a light crop. Root crops do not seem to be in favor with our farmers and are grown only to a limited extent. N. Y. Farmer.

It is the opinion of many farmers, that the grain, particularly the wheat, is likely to head better than usual, and will not be so liable to rust. Peas and potatoes are looking well, and apples will be abundant. The vast supplies of gold must cause prices to be higher all over the civilized world. Canada New Era.

Grains are looking well; potatoes, peas, beans &c., look uncommonly well. Fruit, so far as we have seen, looks uncommonly well. A warm July will bring about a good, general crop. Granite Farmer, N. H.

The Springfield Register says "that Illinois will roll up a larger crop this year than has ever been realized in the State."

The weevil is doing considerable damage to the wheat fields in some parts of Ohio.

PROSPECTS OF FRUIT.—The *Ohio Farmer*, (by the way, one of the very best family papers published this side of any where) says "in January we were told by some writers, that not only the blossoms were destroyed but even the trees. We then said, *not so*—for we care not how cold it is, provided that no clear sun follows immediately; and the last has proved our word correct; for we now find peach trees in perfection, in locations where the thermometer has sunk 24 deg. below zero the past winter. We look forward to a very large crop of apples, pears and cherries throughout the entire western states, and the

Canadas—for, thus far we have seen nothing injured, and we write after having been somewhat in Canada, pretty well into Michigan and Ohio, and on the authority of editors and numerous correspondents.

Of peaches, there will be on all high and open places, and especially in orchards situated on dry, gravelly, or sandy soils, about one half of a crop.

Plums will be just as plenty as the curculio chooses to permit. Of all the small fruits an abundance may be counted on.

The *Maine Farmer* says "the appearances now are that, we shall have a great crop of apples. The season during the blossoming of the trees was favorable. There is an abundance of apples set, and if one in ten hold on till ripe, there will be a great crop."

Bites of Poisonous Snakes.— A correspondent of the Southern Cultivator gives the following, as an infallible remedy for the bites of poisonous snakes.

It is the *Tincture of Lobelia*, either of the herb or seed. As soon as possible after the wound is inflicted, bandage, as tightly as possible, the limb above the wound to prevent the circulation of blood below; then commence giving the tincture in doses of a table spoon or wine glass full, every few minutes, until copious vomitings ensue, at which time the bandage may be loosened. and the vomiting kept up by repeating the dose, or giving warm water. When the patient begins to recover, the stomach should be kept slightly nauseated for one or two days by the Lobelia, after which Tonics should be given. It would probably be well to apply strong Spirits of Hartshorn, or what is termed by druggists *Threble Aqua Ammonia*, to the wound.

Currant Wine. To one quart of ripe currant juice add three pounds of the very best white sugar, (the finer the quality the better,) and to this as much water as will, with the juice and sugar, make a gallon. Put the mixture into a keg or demijohn, leaving it open for two weeks, or until the fermentation subsides; then cork it up tightly, and let it remain quiet for five months, when it will be fit for use and may be racked off into bottles. Pa. Farm J.

Horses Feet. Some one says "a simple application for a horse's feet which are brittle or hoof bound, I learned from an English shoer; and having tried it with good effect, and never have seen it fail.

Mix equal parts of tar and some soft grease, having the foot clean and dry; apply it hot, but not boiling, to all parts, letting it run under the shoe as much as possible. In bad cases, the application should be made every day for a week, and then two or three times a week, till the hoof becomes strong and smooth.

Egg Pone.—Three eggs, a quart of corn flour, a large teaspoonful of fresh butter, a small teaspoonful of salt, a half pint or more of milk. Beat the eggs very light, and mix them with the milk. Then stir in, gradually the corn flour, adding the salt and butter. It must not be a batter, but soft dough, just thick enough to be stirred well with a spoon. If too thin add more corn flour; if too stiff add a little more milk. Beat or stir it long and hard. Butter a tin or iron pan; put the mixture into it; and set the pan immediately into the oven, which must be moderately hot at first, and the heat increased afterward. It should bake an hour and a half, or two hours, in proportion to its thickness. It should be eaten hot with butter or molasses.

ACKNOWLEDGMENTS.

Rural Hand-Books.—We are indebted to C. M. Saxton, Agricultural Book Publisher, New York, for a series of small books, entitled "The Bee, The Hog, The Horse, and The Domestic Fowl." They are neatly got up, familiarly illustrated, and contain many useful hints and suggestions for those engaged in the rearing and management of these creatures.—They are cheap, and should be in the hands of every farmer. Price, 25 cents each.

Mammoth Pie Plant. Our acknowledgements are due Mr. B. Cahoon, of Kenosha, for a generous bundle o his extraordinary *Pie Plant*. We had heard of Mr. C's variety of pie plant before and formed elevated notions of it ; but we admit, that no correct appreciation of either its size or quality, can be arrived at, short of a practical demonstration by vision and taste. The size of both stalk and leaf, of the specimens sent us, is enormous, and look as though nature had endeavored, even to outdo herself in their production.

Literary Messenger.—We observe that this useful periodical, published at Detroit has, passed into the hands of H. S. Stark. No change in the Editorial department.

The Horticulturist, for July, is on our table, and receives the welcome in our sanctum it so well deserves. All engaged in Horticulture should take this work. It contains a fund of useful matter.

The Scientific American.—This is a valuable work—most admirably adapted to the wants of Mechanics and Manufacturers; and is probably *the* best work of the kind published in the world. It merits a wide circulation. Published weekly by Munn & Co. N. Y., at $ 2, 00 per year.

THE NATIONAL PORTRAIT GALLERY.—We are in receipt of the first number of a work bearing this title. It is proposed to publish the work in 40 number, at 25 cents each—Each No. is to contain three splendid Steel Engraved Portraits, accompanied by Biographies of the individuals. The object of the work is, to perpetuate the memory of Distinguished Americans of our own, and earlier times. This noble enterprise deserves the encouragement of every true American. It is a work of real merit. Robert E. Peterson & Co. Publishers, Philadelphia.

We shall publish the Prospectus in our September number.

WESTERN HORTICULTURAL REVIEW.—The July No. of this excellent Journal is on our table; replete with matter adapted to the wants of Western Horticulturists. This Journal is peculiarly adapted to the West and should be patronized liberally, as it will be, by all who desire to keep up with the progress of Horticulture.

GODEY, for August is on hand—another double No., as elegant and tasteful as any of its "illustrious predecessors;" only a little more so. We have not received the June No. yet. Let us have it.

THE LADIES WREATH.—Here comes another candidate for public favor.—It is exceeding neat and tasteful withal. This magazine fully sustains its high reputation, for purity and excellence of matter as well as elegance of embellishment. We would not part with the flow-embellishments contained in the numbers at hand, for double the price of the work. J. C. Burdick, Publisher, N. Y. $1. 00 per. year.

THE WATER CURE JOURNAL.—This energetic advocate of Reform is always welcome to our sanctum.

WOODWORTH'S YOUTH'S CABINET—A perfect GEM of its kind. Every youth in the land should have the benefit of its teachings. D. A. Woodworth, New York, $1, 00.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., SEPTEMBER, 1852. NO. 9.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER.

TERMS:

50 Cents a Year in Advance;

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For each subsequent insertion	75

OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

For the Wisconsin & Iowa Farmer.

Northwestern Fruit Growers Association.

FRIEND MILLER:

You are aware that the next meeting of our Fruit Growers Association is fixed for Wednesday the 29th day of September, instant—

Will you be so good as to place this notice on your first page, in your September number and mark the article, in copies sent to your western exchanges; as I presume western papers will do us the favor to "notice" if their attention is directed thereto—and I much fear that there are still some western fruit growers who do not take the Wisconsin Farmer.

The objects of our association are certainly of more interest to the man who plants orchards, than to him who raises trees for sale—and yet the latter class have, hitherto, constituted the mass of members in attendance at our annual meetings.

It is hoped now, however, that every man who intends to plant fruit trees, and can come, will be on hand at Dixon; for much money may be made by knowing what varieties to select for each locality, and much loss and disappointment avoided, by hearing the honest opinions and expensive experience of the many practical men who will doubtless be present, and ready, as heretofore, to talk over the matter for the benefit of all concerned.

A large collection, of all the varieties of fruits in season, will be found on our tables, and much knowledge of sorts and their *names* and properties obtained—and as we trust all will bring specimens, whether under name or not, many mistakes may be rectified on the spot, and nurserymen and their customers understand each other much better therefor, and be mutually benefitted by the information given and received.

We also look for eminent pomologists from the east, and a very large delegation from Central Illinois, Indiana, Michigan, Missouri, and Iowa; and as we fixed the meeting so far north, on purpose to accommodate the Fruit Growers of Wisconsin and Northern Illinois, it is to be hoped that they will be present in numbers, and with fruit to match.

I am informed by our Dixon friends, that arrangements are in progress for the comfort and convenience of all who may honor them—Private families, as well as public houses, expect welcome guests on this fruitful occasion—with the one, "the latch string will be out," and with the other, I am told, that (as pomologists "take notes" and print them) an attempt will be made to show that Dixon Hotels are not the worst in Illinois. But "nous verrons"—Dixon is a fine place, and the Rock River towns are worth seeing—and there is no trouble in getting there—for that noble old prince of western stage proprietors—John Frink—and his liberal and enterprising coadjutors will see to it in season if properly notified.

Now, good friends, this meeting at Dixon is not to be a little neighborhood convention; but one in which the whole northwest is concerned. Fruit is an important crop, and as it takes a little longer to grow it than a crop of wheat—and *once planting lasts for a life time*—it is very important that you have the RIGHT KIND OF SEED: For I know, from experience, that it costs "a heep" of labor to change a worthless engrafted tree, of bearing size, (and there are many such in the west) into a tree bearing GOOD FRUIT AND PLENTY OF IT—and such are the trees we want in our orchards for profit.

Let us meet then at Dixon, and compare notes, and fruits too, and take each other by the hand once a year—We shall make money by it, and what is better—make FRIENDS.—There will be many whole-souled specimens of western humanity in attendance—men worth knowing — real "enlarged Yankees" of the

true western breed—I wonder who that loves himself—good fruits and good friends—will wish to stay away.—I should not be surprized if we had a dozen western editors there—three or four have promised, (of our sort,) and we may have the pleasure to aid in humanizing a few of the political ones—and some of them —poor fellows—if they don't need it, would be the better for a little relaxation, in the midst of our acknowledged humanizing influences, in these hot days and hotter electioneering contests.—Come on, gentlemen of the press.—There is no lack of "copy" now—one news-paper article is now just as like another as the apples on the same branch—your "subs" can use the scissors, and you may unbend the partizan mind, and pick up a tho't or two, beyond the dust of the partizan battle field.—I was of you, and in the wordy strife, once on a time—and I "rede ye" *let go and take a new hold*—you will fight with more energy when on the tripod again.

But I am scribbling a long article instead of the brief notice required

Yours truly, JOHN A. KENNICOTT.

The Grove, Ill., July 20.

For the Wisconsin & Iowa Farmer.

Insects on Fruit and Forest Trees.

KENDALL, Kendall Co., Ill., August 16, 1852.

MARK MILLER, ESQ.,

Dear Sir—I have growing for my own use several hundred fruit trees, beside forest-trees and ornamental trees and bushes ; and I find a great variety of Cat'plrs on them during the season; and find that they need to be looked after very often; or the trees may be entirely stripped without my knowledge. As an instance: This spring I transplanted a Weeping Willow Tree, which was 14 feet high before I trimmed it, and it was set among other trees and grew finely for a while. All at once I noticed that it looked as if there were caterpillars at work, and intended to see about it, but it was forgotten for a few days, and when I did look, I found it pretty thoroughly stripped and the Caterpillars all gone. Having a copy of Dr. Harris' book, I have generally when convenient, made notes of the kinds which I have found, and endeavored to find out their names &c. Like Dr. Kennicott, "I am not an Entomologist," but get what little knowledge I have of it, from Dr. H.'s book and from obser vation.

In August No. Mr. Brayton speaks of a red collared, hump-backed Caterpillar found on fruit-trees in August. This is no doubt Notodonta Concinna, or Red Humped Caterpillar of Harris, p. 308—9 which is found here in August to September, on Apple and Black Walnut trees.—Dr. H. says "they are found on Apple, Cherry and Plum trees, and sometimes found on Rose-bushes and Thorn-hedges." They are yellowish-brown, striped with small longitudinal stripes of black and white; two white stripes on each side. The head is red, and there is a bright bunch or hump on the fourth segment or joint. The full-grown Caterpillars measure one and one-fourth inches or rather more in length. "Different broods appear in August and September, from eggs laid in July in clusters on the underside of the leaf, generally near the end of a branch," H. condensed. Saperda Bivittata, two striped, or brown and white Saperda, (incorrectly printed Spada in my last.) Dr. H. pp. 89—90 says, "They are found principally on Apple, Quince and Mountain Ash trees, and Hawthorns and other Thorn bushes, June-berry or Shad bush, and other kinds of Amelanchier and Aronia. And that the larva state continues two or three years. Found in June and July from eggs laid upon the bark near the roots in those months." Attacus Cecropia, H. p. 279—"Back light green, sides a darker green ; two rows of blue warts on each side, with a row of white spots, having a black margin round them, between—also two rows of yellow warts on the back, and two of those nearest the head are larger than the rest. And four nearest the head are a bright "coral red" on some, and on others paler or a salmon color—and all the warts have more or less black hairs on them—five pair of large bluish feet, and three pair smaller, greenish.—The largest measured 2½ inches in length.—With me the moths came out (in the house) the last of May, 25 to 27, and in June. (14 July, '52, I found the only Caterpillars of this kind I have seen this year, on a Pear tree, and July 28, '51, I found them on Pear, Plum and Apple trees ; and they are found on Black-Walnut trees.) Dr. H. says, "the moth appears in June, and the Caterpillars are found on Apple, Cherry and Plum trees, and on Currant and Barberry bushes in July and August. It comes to its full size by 1st of Sept., and then measures three inches or more in length, and is thicker than a man's thumb.—It spins its cocoon early in Sept. on twigs of the trees or bushes on which it lives. The cocoons are fastened longitudinally to the side of a twig; and they average three inches long and an inch in diameter at the widest part." If any one should find on their trees a Caterpillar as large or larger than the Potato-Worm, light green, with blue, yellow and bright red spots or warts—that is the Caterpillar described above; and they should kill

all they see, as soon as possible. Attacus Polyphemus, H. p. 278—Found on the Hazel and I think on Apple on Pear trees, and on Hawthorn. " Color, pale green on the back, darker on the sides—back translucent, so as to display the alternate contractions and relaxations of the vessels. Sides marked with six bands on each, opaque, terminating at each end in a golden knob, furnished with a bristle. On anterior side of each of these bands an oval spot, light brown in the center, bordered with white. Similar spots on the segments (or joints) next before and after the bands. On each side of the back a row of the golden knobs, as on the sides.—Body thinly covered with hairs. The hind feet with a shining edge of a light lead color, and a similar band proceeding from their posterior sides up the back, so as to form a V." W. P. R. Dr. H. says " the moths appear in June and the Caterpillars in August and Sept. Their oval cocoons, (smaller than the other kind,]which they cover with leaves, fall to the ground in the Autumn ; where they remain during the winter." If I can find cocoons of either kind this season I will send you some, that you may figure them and the moths.

Philampelus Achemon.—H. p.228,—"Some of these Caterpillars are pale green, others are brown, their sides are ornamented by six cream colored spots, oval and scalloped [each of these spots has a wood color, or light brown oval on the lower part.] The tail [which is pale red or pink] is recurved over the back ; the tail disappears after a few changes of the skin, leaving only a smooth-eye-like raised spot [and the eye of it is a yellow ring enclosing a black ring.] They have the power of withdrawing the head and first three segments of the body within the fourth segment, which gives them a short and blunt appearance when at rest. They measure when full-grown, three inches or more in length, and are thick in proportion. They come to their growth in August, and enter the earth to transform and the moths appear in June and July. They live on the grape vine and also on the common creeper [Ampelopsis Quinque folia.]"

I have found rings of eggs on small twigs, and very handsome Caterpillars which I think are " the Caterpillars" of H., p. 266—"When fully grown, about two inches in length.—Their heads are black; extending along the top of the back from one end to the other, is a whitish line, on each side of which, on a yellow ground, are numerous short and fine crinkled black lines, that, lower down, become mingled together, and form a broad longitudinal black stripe, or rather a row of long black spots, one on each ring, in the middle of each of which is a small blue spot ; below this is a narrow wavy yellow line, and lower still the sides are variegated with fine intermingled black and yellow lines, which are lost at last in the general dusky color of the under side of the body ; on the top of the eleventh ring is a small blackish and hairy wart, and the whole body is very sparingly clothed with short and soft hairs, rather thicker and longer on the sides than elsewhere. The Caterpillars appear on apple and cherry trees in April or May. It is the Clisiocampa Americana, or American Tent Caterpillar." Caterpillars on an Apple tree September 29, '50.—Solitary andhad no web—color, head and body black, sides covered with clusters of white hairs which conceal the feet. On the back three rows of hairs, those in the center are black, and the other two rows are white. Underside dirty white, eight pair of feet—5 pr. large and 3 pr. small. It coiled up into a ball when it was disturbed, and was perhaps some kind of Lappet Caterpillars [H., p. 273.] Geometer or Loopee, June 17, '50 on an apple tree—solitary,—color, bright yellow, with ten black [crinkled] lines on the back, three on each side darker and four in center paler.—Eight small dots on each side, on the yellow ground. Underside paler than the rest of the body—five pair of feet, three pairs in front and two pairs behind; supposed to be Hybernia Filiaria of Dr. H., p. 341—42, which he says is found on Apple, Elm and Lime Trees or Basswood. I will send more of some sort when convenient—and remain your obedient servant,

E. S. L. Richardson.

Osage Orange Hedge.

There has been various calls in the public journals for a sample of a hedge of this plant. I would state that I have about eighty rods planted 3 years ago this spring, and now about seven feet high.

On one side are my orchards and gardens. On the other, in part a pasture in which I kept my stock of horses, cows, calves, sheep, hogs, and geese; while the other part is between the garden and the great public road from Jacksonville to Naples, five miles from Jacksonville.

My hedge was turned out, or the fence all taken away last season when the hedge was 2½ years old ; and all my crops have been perfectly secure since, as any one can see for himself by calling. I have no interest whatever in the hedge business farther than to state to my brother farmers the facts in my case for their benefit. [Cor. Ill. Jour.

State Fair.

The time fixed for holding this annual festival is now so near at hand, that all who propose to exhibit specimens of their skill and industry, should be actively preparing for the occasion. Rouse your State pride friends, and let us have such a display as will do credit to our youthful State. Let every department of productive industry be represented by the best specimens to be obtained, whether the work of nature or art, and we are confident, Wisconsin will rank as high in point of excellence as some of the older States.

Let all, both men and women engaged in Agriculture, Horticulture and Manufactures combine their efforts to bring specimens of the productions of field and forest, of mine and manufactory as well as articles of taste and art. Those who possess articles created by their own ingenuity, skill, and industry, may add much, to the interest of the exhibition by bringing them forward; and we hope individuals having such articles, will not withhold them from competition, by fear of more successful rivals. Rather, let each one *hope*, for the sake of the general welfare, that his own specimens *may* be excelled. Those citizens who feel interested in developing the resources of our State, or directing the energies of her people, may unite their efforts to promote the great object of the Fair. It is by assembling and communing together—by examining the different kinds of agricultural implements, and various labor-saving machines—by comparing the results of experiments, and diffusing the knowledge gained by experience and observation, that "thought is engendered and man is instructed and improved." "The value of agricultural exhibitions is not to be measured by the crowd of people in attendance, nor by the number of articles exhibited; but by the new facts and valuable additions they bring to the stock of agricultural knowledge."

Man, may study the principles of Nature, and by patient investigation, and studious research, be able to comprehend the laws which have governed the vegetable kingdom from the beginning, and thus learn, that by following an undeviating rule, he can increase his crops to twice their present yield, and thus obtain a rich reward for his pains, by reaping an abundant harvest The influence of his improvement, will be to stimulate and encourage others to practice more care and system in their laborious calling. The knowledge of the agriculturist, whether derived from study, or observation, if confirmed by practice, may become common stock, and contribute to the success of all connected with the advancement of the cause.—No place is so advantageous for displaying *all* the effects of care and system as the State Fair—No means so efficient for exciting emulation or for advancing agricultural progress. A few years since, an agricultural fair was regarded as a mere holiday for farmers, and little energy on the part of the exhibitors was required to enable them to compete successfully with any specimens presented. Not so now—The truths of science and its practical application to agriculture, are admitted and practiced by a large class of intelligent farmers, and they now feel that these industrial exhibitions require their best energies and closest observation.

For the Wisconsin & Iowa Farmer.

State Fair and Poultry.

Mr. Miller, Sir—I make no apology for dropping you a line upon the subject of "Domestic Fowls," in connection with our State Fair. I have seen no evidence that the managers of this exhibition are disposed to give this subject much attention; whether from oversight, or from a mistaken notion that it was not of sufficient importance, I cannot say. The rearing of poultry is considered, by many, as an insignificant article of stock; but the subject is beginning to assume importance at the east, and it is possible that we, of the west, may add to the interest of our Fairs, by giving it a place. What is your opinion?

It seems to me that very much of our poultry is of an inferior class, and that there is room for improvement. But I may be singular in this opinion; and if so, I have no wish to dispute the point. Facts are better than theories; an exhibition of the different varieties of fowls may do something to create a suspicion at least, that there is such a thing as a greatly improved breed of poultry, to any of the ordinary varieties. K. L.

Milwaukee, Aug. 9.

Remarks.—Our correspondent K. L. is evidently not very well posted up on the doings of our State Society. By reference to the August number of the Farmer, (page 173,) he will find that he is laboring under a mistake, in supposing that the "Managers" of our State Fair, have not given due consideration to the subject of improving our poultry. He will there find a list of twelve premiums offered for the best specimens of as many varieties of poultry—amounting in the aggregate, to nearly as large a sum, as is offered on swine. We fear K. L. is not a subscriber to the Wisconsin Farmer; or he would have been better informed on this point of inquiry.

Bean and Wheat Rot in England.—A disease very similar to the potato disease, has affected the beans in several districts in England, and the crop has been wholly lost. Fears begin to be entertained that a more important crop—the wheat—will be attacked by a like disease, as there are some indications of it.

Sheep at the State Fair.

We anticipate the finest display of sheep at our State Fair, that our citizens have ever seen. Several of our citizens will be on hand with their best specimens, which are hard to beat. We may also expect to see some fine sheep from abroad.—David Hall, Esq., of Orleans County, New York, writes us, that he shall probably attend our State Fair, and exhibit some of his French Merino Sheep. From what we have learned concerning Mr. Hall's stock, we judge he has some of the best French Merino Sheep that can be found in this Country. Our friends who are engaged in raising sheep, will then and there have an opportunity of comparing them, with the best specimens of our own State; and also of securing some of this kind, as Mr. Hall will probably have with him some for sale.

Texas Fair.

The first Agricultural Fair held in Texas took place at Corpus Christi in May. A large number of Mexicans as well as Americans from the neighboring states were in attendance. The exhibition of the products of the soil, and of animals of imported breeds was small. Large droves of horses, jacks, jinnies, mules, brood mares, sheep and horned cattle, made an interesting display.

A drove of 1,500 head of neat cattle was exhibited from one of Col. Kinney's ranchos, which are represented to have been a fine lot. Several flocks of sheep of the native Mexican breed, and pure blooded merinos were shown.

The cattle in Texas roam at large during both summer and winter. They are marked when young and herded occasionally to keep them gentle and wont them to their home, but never for the purpose of feeding as here at the north. It is doubted whether cattle reared on wild grass and in a semi-wild state as they are in Texas, will make beef suitable for packing; but for market supplies of fresh beef, it is believed to be equal if not superior to any other.

Management of Swine.

"As dirty as a pig," describes, in most men's vocabulary, their "ne plus ultra" of personal uncleanliness. It is a great, but a common error, this, that a hog is naturally and of choice a filthy animal; delighting in a mud-bath, as the greatest sublunary luxury; and becoating himself with mire, as proudly as the veriest dandy would broadcloth himself *a-la-mode*.—A hog, if reared in a respectable manner and washed of a Saturday night with the rest of the children, will do no discredit to his bringing up, but may chance to shame many of his masters, by the decency of his appearance. Kept clean by an occasional washing, and the privilege of neat apartments for his noontide nap, he thrives better than when forced to wallow in the mire; for he seeks the mud-medicated bath, merely to allay the irritation of his skin. If you keep his hide clean, he will no longer need it, and no longer seek it, unless a bad early education prevails over his natural swinish notions of neatness. We have tried thoroughly, the plan of keeping hogs clean, by washing and by good pens and nice litter, and we have found an advantage in it.

"As drunk as a sow," is another proverb, which unjust and ingenious man has invented and perpetuated to keep himself in countenance. "*David's* sow" is sometimes particularized. Now it is a fact, that may be new to many of our readers, that the hog, in his anatomical structure, his diseases, and in many of his habits, approaches more nearly to man, than any other of our domestic animals, insomuch that surgeons, hard run for human subjects whereupon to lecture and demonstrate to their journeymen saw-bones, have frequently selected a pig to occupy the vacant table. Very many of their diseases are identical with our own. And their habits—their laziness, their omnivorous appetite, their clamorous urgency for kitchen drippings—are certainly very like to those of many of our own kind—we won't specify politicians. But in the matter of the Maine law they shame in their practice some of its most wide mouthed friends. The hog is "a much abused people."

In feeding swine, men should use judgment. A hog wants his meals regularly, or he worries and squeals off an ounce or two of fat. In early youth when weaned from the maternal teat and up to the age of six months, at least, he should be allowed the largest liberty consistent with circumstances. Exercise expands and develops his frame, and fits it to carry more flesh and fat; and ensures to the pig a good constitution. Having attained a sufficient size, he may be penned and gradually fed more and more; and when once fat should not be allowed to lose a pound. Regularity and repose are now necessary to ensure the most satisfactory state of obesity.

Clover is an excellent fodder for swine.—On clover and water alone, a well-bred pig will become a very Daniel Lambert of a hog. Green corn may follow clover; and as fall fades into winter, push in the meal. This is the mode of feeding which we have seen adopted with the most entire success for large herds; where were no facilities for butter-

milk or other swill, that many farmers have in abundance. At the South and West, the swine find their own living, and "not knowing, can't say," whether their owners would or would not find it to their advantage to have a little more system in their swine-feeding.

The breeds of swine now most valued, at the North, are the Suffolk and the Middlesex. These two are very much alike in every respect; and after having bred both for many years, we would not give "the toss up of a copper for a choice." To be general favorites they are hardly large enough, though their early maturity, small consumption of food, and wonderful inclination to fatness, more than compensate, in cash, for their want of size.—Suffolk pigs have been slaughtered at six months old that weighed three-hundred and ninety-four pounds. No man need have a finer breed than this. If he wants a bigger breed, let him select one of those Noah's ark race, that weigh eight hundred dressed, (at Methuselah's age) and try to make a breed by using a full blood Suffolk, Middlesex, or Essex boar. We wonder that no one has imported the Leicestershires, to gratify this taste for large swine.

We had collected on our own farm the materials and moulds for making swine on a large scale, and some of them after a large pattern, when we were summoned away from the pig-pen to the pen-editorial. And we have no hesitation, in saying that we have in the country all that is needed to build up breeds adapted to every reasonable taste and to all localities, except a good knowledge on the part of the farmers of the true principles of breeding.

[Journal of Ag.

Turnips for Hogs.

A correspondent of the Soil of the South, in remarking upon the value of turnips says:

"I had up sixty-two hogs to fatten for pork last fall. I made a negro man drive a wagon into the patch every day for two months or more, and fill the body with turnips, and drive them near the pen, where I had a large boiler arranged for cooking, which was kept constantly boiling. I used four bushels of meal to a wagon load of turnips, adding one quart of salt to each boiler full. My hogs fattened finely on this feed."

By smut, we suppose he means black blast. For this, we have found a preventative which has proven in our hands entirely successful.—It is simply to soak the seed wheat before planting thoroughly in a strong decoction made of blue stone. Soaking in strong salt and water, and rubbing in lime, is said to be good, also. [Ib.

Pepper.—One of the most useful vegetables in hygiene is red pepper. Especially in warm countries has it been considered invaluable as a stimulant and auxiliary in digestion. Among the Spanish and French races it is used in the largest quantities, and they invariably enjoy most excellent health. Of late, particularly since the cholera visited our state, our planters have begun to discover the virtues of this vegetable, and mingle large quantities of it with the food of their negroes. Considerable attention has been drawn to the selection and cultivation of the best kinds of pepper. Among those who have appreciated the importance of this vegetable is that admirable planter, and exceedingly practical gentleman, Col. Maunsel White, the proprietor of "Deer Range," commonly known as the model sugar plantation. Col. White has introduced the celebrated tobacco red pepper, the very strongest of all peppers, of which he has cultivated a large quantity, with a view of supplying his neighbors, and diffusing it through the state. The tobacco pepper yields a small red pod, less than an inch in length, and longitudinal in shape. It is exceedingly hot, and but a small quantity of it is sufficient to pepper a large dish of food. Owing to its oleaginous character, Col. White found it impossible to preserve it by drying; but by pouring strong vinegar on it after boiling, he has made a sauce or pepper decoction of it, which possesses, in a most concentrated and intense form, all the qualities of the vegetable. A single drop of this sauce will flavor a whole plate of soup or other food. The use of a decoction like this particularly in preparing the food for laboring persons, would be found exceedingly beneficial in a relaxing climate like this. Col. White has not had a single case of cholera among his large gang of negroes since that disease appeared in the south. He attributes this to the free use of this valuable agent. [N. O. Delta.

Fidelity.

Never forsake a friend. When enemies gather around—when sickness falls on the heart—when the world is dark and cheerless—is the time to to try true friendship. The heart that has been touched will redouble its efforts, when the friend is sad or in trouble.—Adversity tries true friendship. They who turn from the scene of distress betray their hypocrisy, and prove that interest only moves them. If you have a friend that loves you—who studdies your interest and happiness, be

sure you sustain him in adversity. Let him feel that his former kindness is appreciated, that his love was not thrown away. Real fidelity may be rare, but exists in the heart.—Who has not seen and felt its power? They only deny its worth and power who have never either loved a friend or labored to make him happy. The good and kind, the affectionate and virtuous, see and feel the heavenly principle. They would sacrifice wealth and happiness to promote the happiness of others, and in return they receive the reward of their love by sympathising heartsand countless favors, when they have been brought low by distress and adversity. [Ex.

BEET ROOT IN UTAH.—The N. Y. Tribune, says that J. W. Coward, W. Collison, and Russel, who have recently emigrated from England to Utah, have taken with them machinery for the manufacture of Beet-root Sugar, on the largest scale. They are wealthy men, and have invested $250,000 in this enterprise alone. Their machinery was made in England, and will turn out 260 tons of sugar in a year. Fifty wagons were ordered at Kanesville to carry the machinery to Salt Lake City. The beet-seed was sent out last year. There is no better country in the world for the production of beets and other roots, than Utah. It will be a great advantage to the people to have an article so indispensable as sugar supplied from a manufactory among themselves. [California Dem.

Harmony of Nature.

Some insects have no defence, except the diversity of their motion. When the notopeda or elater is laid upon its back, it uses a spring hidden in its breast, and like a skilful jumper, it falls upon its feet; the butterfly escapes from the birds by its zig-zag flight; the spider runs away from its enemies by letting itself down its thread, like a sailor along a cable; the gyrahus describes with rapidity circles on the crystal waters, and the tipula lightly execute their dances there without wetting their paws.

If we cast a passing glance upon the fishes, we must perceive that the fluid which surrounds them serves as a means of conveyance; aided by their fins, they travel through their domains with ease and comfort. Nature has provided them with a bladder filled with air, which they have power to empty and again to fill at pleasure; and thus they diminish or increase the weight and volume of their bodies as they rise or fall in the water.

It is generally known that some fishes, like birds, are provided with an oily gland; with this, their scales are anointed with a substance which protects them from the relaxing effects of the water. But what is most surprising is, that this gland is placed on the head, in such a manner that the simple act of swimming causes the oil to slide over their bodies, and cover them completely. Without this admirable position, this gland would have been useless, as fishes have neither hands nor feet to anoint themselves with this oil.

[English paper.

The Modern Belle.

We select the following stanzas from Mr. Stark's poem, read at the New Hampshire State Fair, held at Manchester:

She sits in the lighted parlor,
And waits for the tardy beaux—
She plays with her little fingers,
And trots with her little toes:—
She calls for her Spanish poodle,
She calls for her China fan;
She kisses her long-eared puppy,
And wishes it was a man.

Her mother stays in the kitchen,
Dressed up in her coarsest attire,
She's freezing over the ices;
And roasting over the fire;
Her father goes clad in his russet,
And ragged and seedy at that—
His coats are all out at the elbow;
He wears a shocking bad hat.

The daughter sits in the parlor,
And rocks in the easy chair:
She's clad in silks and satins,
And jewels are in her hair—
She winks and giggles and simpers
And simpers and giggles and winks,
And though she talks but a little,
'Tis vastly more than she thinks.

She lies a-bed in the morning,
Till near the hour of noon;
Then comes down snapping and snarling,
Because she was called too soon.
She doats upon men unshaven,
And men with "the flowing hair,"
She's eloquent over mustaches,
They give such a foreign air.

She falls in love with a fellow,
Who swells with a foreign air;
He marries her for her money,
She marries him for his hair;
One of the very best matches—
Both are well mated in life,
She's got a fool for a husband,
He's got a fool for a wife.

FRENCH MERINO SHEEP.

THE PROPERTY OF DAVID HALL, GAINES, ORLEANS CO., N. Y.

The Buck "Gen. Wool," on the left. sheared 19 lbs. and 9 oz. in May last ; the fleece being twenty days less than a year's growth—sheared and weighed by a committee, in presence of several hundred spectators. The above sheep are from the flock of A. L. Bingham, of Vermont. I am constantly receiving large supplies of this and other kinds for sale.

For the Wisconsin & Iowa Farmer.

French Merino Sheep.

MARK MILLER, ESQ.—Dear Sir.—Enclosed you will find a document taken from some New York paper published at Albion Orleans Co., I believe; (possibly it may be the Rural New Yorker.) Be the paternity of the above engraving and notice what it may, I can say from my own knowledge obtained by personal examination, that Mr. Hall has dealt pretty extensively for the last few years in a breed of sheep, known I believe in Vermont and New York, as the French Merino or Tainter. My own knowledge of the history of these sheep is not what I could wish; but let their origin or genealogy be what it may, the animals themselves are in my humble opinion taken as they are, *well* worthy the attention of those who wish to enter the ranks of profitable wool growing in this State. It is quite likely that some one or more of your correspondents may understand and give a more intelligible idea of this stock of sheep than I could do—if so, I hope they will come forward and they shall be heard. I feel some anxiety myself to hear the subject of the different breeds of sheep discussed. I should like to call *particular* attention to this variety.

In the mean time I will just say—that so far as I understand them the great distinctive features are; 1st, the extraordinary weight of fleece; 2d, fineness and length of wool combined. These with a large development of carcass are a hardy constitution and *points* which distinguish them from the old fashioned Spanish Merino or Saxony sheep, so far as I have known them in this country.

A friend of mine remarked the other day that the story of "Gen. Wool" looked "rather romantic." Admitting even one-half to have been romance, there is something worthy of attention still. It is no *small* matter nor is it *very* common to take off 10 or even 6 lbs. of well washed fine wool. But we are told that the ewes will average the flock of 100 through, 6 lbs. and the bucks 10 to 15. Now if this is true, and I must say that I can not doubt it: and if it is also true that this quality of wool sells *as high* or higher in market than the old fashioned merino short wool, I would ask if, in these days of "light and knowledge," it would not be well for the Farmers of Wisconsin to understand the matter.

I see by your journal that you solicit facts and actual experience from your correspondents. Well, I will state a fact or two in relation to the above sheep. I sheared last year from a half blood French ewe which dropped me 2 lambs the first of March, 6 lbs. 2oz. washed wool. This year I sheared from the two lambs (a buck and ewe) 6 lbs. 1 oz., and 5 lbs. 11 oz. of fine wool. I have a 2 year old three-fourths blood French buck, known by the name of Dandy Jack, which name was bestowed upon him by my friend and brother-farmer, Geo. O. Tiffany, Esq., who is also doing something to improve sheep stock in this vicinity, which sheared about the same last year, after having been transported from the Excelsior State and somewhat reduced by the fatigues of the journey. I do not know what amount he shears this season as he was absent from home at shearing time and I have not had returns—I judge about 8 lbs. He has the characteristics of *the breed* —viz.: wool *all over the head and legs*—as you will see by the above representation which is a good one. Now sir if you think what I have said of the French Merino sheep will prove interesting or useful to the great interest of wool growing in this state, either by eliciting research or awakening attention in any manner to that branch of industry, which is, I believe, destined ere long to hold a prominent place in our agriculture—if you think, I remark, that it will advance the interests of the industrial classes in any manner, you can lay it before your readers. If not, lay it *on* or *under* "the table." FRANCIS D. WELD.

Greenfield, Wis., July.

AGRICULTURE IN FRANCE.—A letter writer for the Republic says: "A trip of six hundred and fifty miles, from the northern to the southern extremity of France, justifies me in the expression of my opinion that God's sun does not shed its rays on so fair a land, or one so thoroughly cultivated. The whole country is literally a garden. Every square foot, from the mountain-top to the lowest ravine, is made to produce *something*, if it be susceptible of it. Their mode of planting or sowing their crops, whether on plain or hill-side, produces the fin-

est effect on the appearance of the landscape; the space allotted for each crop is laid out in squares or parallelograms with mathematical precision, and, whether large or small, the best garden could not be divided with greater accuracy. As there are no fences or hedges, and as the different crops are in various stages of maturity, you can imagine the variety of hues that meets the eye, and the magnificence of the panorama that stretches out in every direction as far as the vision can penetrate.—I am sorry to add in this connection, that seven-eights of the agricultural labor is performed by females, while two or three hundred thousand stalwart men in uniform are idling away their time in the barracks of the cities and villages. In the absence of fences, cattle, secured by ropes, are driven about their pasturage by females; and sheep are confined within the required limits by boys, assisted by a shepherd's dog. Speaking of cattle reminds me that, notwithstanding fresh pork is abundant enough in market, both in England and France, I have not seen a live porker in either country."

To Have a Good Horse.

It is not sufficient to have a good colt, the product of a superior mare with a stallion of good blood and established reputation. This is necessary, but it is not all that is necessary. A most promising colt that attracts universal admiration, while it follows the mare, *may* be grown into an almost worthless horse. How then, having a good beginning shall we grow a good horse, for good horses alone are profitable to raise? By excercising the greatest care in their management until they have ceased to be colts. Many ruin, almost, a colt the first winter by starvation, by turning it into the yard to run with the young cattle to pick up a scanty nourishment and that of the cheapest and coarsest food. There is on the other hand no one season of its life when care and good and full feeding of appropriate food will tell so much for good as this same first winter. A friend, who, for now many years has annually sold two or three young horses at the highest market prices, has often assured us that at no time in the life of his colts did he take so good care of them and feed them better than during the first winter; and that by the effect produced upon them the first year he could tell what kind of horses they would become. There is something so absurd in scanting the supply of nourishment to a young growing animal! Some fancy that such a course will render the animal hardy. The only effect produced upon the growing animal by an unsufficient nutrition, is to hinder his best development.—Wait until he has attained his growth and then stint him if you choose. It can be done then with less injury.

Colts are often put to hard work at too young an age. It not unfrequently happens that you will see a horse of five with all the wear and tear of ten in his appearance.—This should never be. The exercise of the same judgment in the management of colts most use toward children would prevent this.

Colts should be put to exercise and training at an early age, and may do light labor to advantage, but to put upon four years the labor proper only for six or seven years, has been the ruin of many a promising animal.—There are other suggestions that occur properly in this connection, but we will omit them, considering the two mentioned above as the most important. [Granite Farmer.

What are Trees Made of.

If we were to take up a handful of soil and examine it under the microscope, we should probably find it to contain a number of fragments of wood small broken pieces of branches, or leaves, or other parts of the tree. If we could examine it chemically, we should find yet more strikingly that it was nearly the same as wood in its composition. Perhaps, then, it may be said, the young plant obtains its wood from the earth in which it grows.—The following experiment will show whether this conjecture is likely to be correct or not. Two hundred pounds of earth were dried in an oven, and afterwards put into a large earthen vessel; the earth was then moistened with rain water, and a willow tree weighing five pounds, was planted therein. During the space of five years, the earth was carefully watered with rain water. The willow grew and flourished, and to prevent the earth being mixed with fresh earth, being blown upon it by winds, it was covered with a metal plate full of very minute holes, which would exclude everything but air from getting access to the earth below it. After growing in the earth for five years, the tree was removed, and on being weighed, was found to have gained one hundred and sixty-four pounds. And this estimate did not include the weight of the leaves or dead branches which in five years, fell from the tree.

Now came the application of the test.—Was all this obtained from the earth? It had not sensibly diminished; but, in order to make the experiment conclusive, it was again dried in an oven and put in the balance. As-

made of blue stone. Boar[illegible] salv[illegible]

tonishing was the result—the earth weighed only *two ounces* less than it did when the willow was first planted in it! yet the tree had gained *one hundred and sixty-four pounds.* Manifestly, then, the wood thus gained in the space of time was not obtained from the earth.; we are therefore obliged to repeat our question, "Where does the wood come from?"—We are left with only two alternatives; the water with which it was refreshed, or the air in which it lived. It can be clearly shown that it was not due to the water; we are consequently unable to resist the perplexing and wonderful conclusion—it was derived from the *air.*

Can it be? Were those great ocean spaces of wood, which are as old as man's introduction into Eden, and wave in their vast and solitary luxuriance over the fertile hills and plains of South America, were all these obtained from the thin air? Were the particles which unite to form our battle ships, Old England's walls of wood, ever borne the world about, not only on wings of air, but actually as air themselves? Was the firm table on which I write, the chair on which I rest, the solid floor on which I dwell once in a form which I could not as much as lay my finger on or grasp in my hand? Wonderful truth! all this is air. [English Paper.

Profits of an Acre of Carrots.

Francis Dodge, Esq., of Essex county, Mass., raised 34½ tons of carrots on an *acre,* which at 56 pounds to the bushel makes 1380 bus. The rows were 22 inches apart. One pound of orange carrot seed was sown by a machine. The carrots were hoed three times and weeded twice; the last hoeing just before the tops covered the ground. They were dug with a spade; the tops carefully saved and fed to the cows, the tops being at the time knee high. We abstract the above, and give the following statement of the expense of culture, and net profit, from the Transactions of the Essex County Agricultural Society.

[American Farmer.

The expense of cultivation was as follows:

Interest on land at 6 per cent.,	7 20
Ten cords of manure, at $6 per cord,*	60 00
Spreading the same,	3 00
Plowing,	2 50
Harrowing,	2 00
Plowing and raking,	4 00
Seed,	1 00
Sowing,	1 00
Hoeing and weeding,	15 00
Digging,	21 00
Total expense,	$116 70

Value of crop, 24½ tons at $7 per ton	$241 50	
Value of tops,	7 00	
One half manure to land,	30 00	
	$278 50	
Deduct expense,	116 70	
Net profit,		$161 80

*A cord of manure contains 163 bushels.

Planting Acorns and Chestnuts.

We have made partial trials to grow trees from acorns but have not succeeded. We have saved oak acorns till spring and planted them in corn fields in the fall, but they did not seem at home there, and they did not flourish.

We go into oak woods in October and find the new acorns sprouting among the leaves. The sprouts will grow three inches before winter. This is all natural to the forest and we doubt whether we can ever succeed in planting acorns as we plant corn.

The case is the same with chestnuts and horse chestnuts. The seed will not vegetate when covered closely with solid earth. Cherry stones, too, must have but a very slight covering—they do better under the trees where they fall and are merely trodden into the ground by the human foot.

We tried for several years in succession to raise the horse chestnut in a nursery—and did not succeed till we spread the nuts on the grass in the fall and covered them slightly with straw or with thin boards. When this was the course adopted the nuts sprouted quite early in the spring and the sprouts were carefully taken up and placed in the nursery rows.

Squirrels are apt to find acorns that are planted in tilled land—therefore it is not safe to plant in the fall though they will send out sprouts. We imagine that the best mode of treating acorns would be to preserve them in sand through the winter and plant in the spring. [Mass. Plowman.

Effects of Cultivation.—Buffon asserts that wheat is a facitious grain, and that there is scarcely a vegetable, whatever its present character on our farms, that can be found wild; that is to say, growing naturally, in their present perfect state, in any part of the world.

No paper is issued in Sicily, except a price current, and the only authorized journal in circulation is that entitled "Journal of the Two Sicilies," published at Naples, under the official sanction of the King.

HORTICULTURE.

MEETING OF THE NORTH-WESTERN FRUIT GROWERS ASSOCIATION.

The next meeting of the N. W. Fruit Growers Association, will be held at Dixon, Lee Co. Ill., on Wednesday the 29th of September, in the Court House, at 10 o'clock A. M.

A general invitation is extended to the friends of the cause, to attend with such specimens or Pomological notes as may be in their power to furnish. Friends from abroad are respectfully invited—and to such, we feel authorized to pledge, in behalf of our western Brethren, a most hearty welcome.

Small packages can be forwarded from nearly every point to Dixon, by stage—care of J. T. Little. Communications designed for the Convention should be addressed to the Secretary, care of J. T. Little, Dixon.

F. K. Phoenix, Cor. Secretary.

☞ Will news papers friendly to the cause please copy.

The American Fruit Culturist.

By JOHN J. THOMAS—*Seventh Edition, with a large amount of new matter*—DERBY, MILLER & Co. AUBURN, New York.

There was a time, and that too within the memory of men who plant trees for a living, when Books on fruit culture were unknown things, out of the profession, and not always studied by those in it. There has ever been something of mystery attaching to the practice of the simplest principles of the art; and as a Science, Horticulture was almost as much befogged and restricted, half a Century ago, as Chemistry in the days of Paracelsus.

There is scarce a subscriber to the Wisconsin Farmer who has not heard, (and some may have read) marvellous stories of Apples and even roses on Oaks—of Peaches on Walnuts, and fine fruits with one side sweet and the other sour, caused by the section and union of buds of different varieties—and other mysterious fooleries of a like nature, supposed to be practiced by the initiated; and within a few years we have seen professed gardeners from the "Old Country," pretending, and perhaps believing, that they were possessed of secrets of this sort, unknown to the benighted natives of America.

Now, the truth is that there are no secrets in fruit culture, that a farmer cannot learn as easily as wheat-growing, and practice with more certain results. The Science of Horticulture is better studied, more carefully practiced, more experimented in, and more written on than Agriculture—and of all the departments of Horticulture, Pomology is really the simplest and most profitable—the one that pays best in money and in animal comforts and enjoyments.

Men of learning and men of leisure—men of science, of genius and of taste—great men and good men have been Horticulturists since God planted the first Garden in Eden, and set the first man "to dress and to keep it."

Of every class of men in North America, the Society of Friends have stood pre-eminent for their love of flowers and fruits, and their general success in cultivating them.—And since the days of JOHN BARTRAM there have been few men equal to DAVID THOMAS—the father of our author, in his love of plants and trees, and his knowledge of their Natural History, and their habits, and capacities for cultivation. When there was but one Nursery establishment in New York, of any account—and not so many trees and plants on sale in the Union, as one Nursery can now boast; David Thomas was always among the first to procure every new variety, and one of the most successful in cultivating it. His Son, therefore—according to our highest Pomological authority—"ought to have a double natural right to talk about fruit trees"—and this Book fully establishes this right, and a personal one too which few will be found to question, and many to appreciate.

Now we are not going to say that J. J. Thomas' new and enlarged edition is the best Fruit Book extant—though we deem it the most complete in its way, and the cheapest and most comprehensive and reliable work for the farmers library; and one that the professional Pomologist—with DOWNING and BARRY on his shelves—should not think of doing without. It is really a small library of Po-

mology itself—about 400 pages of solid matter, and 300 accurate figures *for one dollar*; and with few waste words, and no waste space; it is a Book that every man who plants fruit trees or eats fruit should possess.

J. J. Thomas is not (Strictly speaking) an original writer. There is little that is new, and less that is speculative in this Book. Every thing in it is *practical*, and every thing *brief*. The Author has great powers of collation and condensation, and possesses that rare quality of making a few words convey a great many ideas—and in a style so clear, that no one can mistake his meaning, and few fail to comprehend the subjects of his descriptions, and the principles and practices he has so faithfully illustrated.

To our readers we say, purchase the works of Downing and Barry, and others if you can afford it, for these are in a measure indespensible, and buy this Book too, for you cannot well afford to do without it; but if you will have only one, take THIS, though you will find it *pay* if you buy them all. †

The Apple Tree Borer.

The above engravings represent the borer in its perfect state, and as it appears in the grub.

Among the many enemies which the fruit grower has to contend with at the present day, no one is more formidable than the apple tree borer, (*Saperda bivittata.*) The Quince, Mountain Ash, and Thorn are also subject to the attacks of this insect. It comes forth from the trunks of the trees early in June, making its escape in the night, during which time it passes from one tree to another, committing its depredations and laying its eggs. In the day time, it remains generally concealed among the leaves of the trees and bushes upon which it feeds. It deposits its eggs in the months of June and July. The back of the perfect insect is marked longitudinally with white and light brown stripes, while the face, the antennæ, the under side of the body, and the legs are white.

Sometime since a communication appeared in the Mass. Plowman, from Mr. Wm. C. Grant of Maine, upon the character of the apple tree borer. His observations have thrown some new light upon its habits, valuable to the orchardist. If the eggs are deposited as here represented, it will be an easy matter to find their place of concealment and destroy them before they hatch. Now is the time to look after this insect, as we are informed it continues to deposit its eggs till the middle of this month. We have not heard much of the appearance of this insect hereabouts, yet; but nevertheles, it may be looked for with certainty—in fact, it is already amongst us, or something else equally as destructive. We have lately heard complaints of the dying of apple trees in this vicinity from some cause unknown—one instance of a whole orchard of fine trees, just beginning to bear fruit.—Look to your trees; you cannot be too vigilant in their protection from both insects and disease. The borer generally deposits its eggs within two feet of the ground. No rubbish, such as grass and weeds should be permitted about the trunks of trees at their base, as all such stuff affords a hiding place for the insect during the day time and conceals the appearance of tis operations during the night.

Mr. G. says "I found one of the bugs and put it with a smooth fresh limb of an apple tree, under a glass. It readily fed on the bark. During the day it was very dull but at night was exceedingly brisk and active. As soon as it was dark, it would commence piercing a row, about an inch in length, of very small holes through the bark, and then with its sharp teeth or cutters, which it seems to use like a pair of shears, by putting one cutter in one hole and the other in the next, it, apparently with great ease, cut the bark from one hole to the other, and so continued, until

it had cut each and every hole into the other. By this means it made a perfect slit in and through the bark, the whole length of the row of holes, which, as I have before said, was about one inch in length. It would then make use of its tail as a pry, and with it raise up the bark so far as to enable it to deposit its eggs under it. In this way it continued to deposit from one to four eggs every night, until the middle of September. My examination of its operations was by the light of a lamp which did not disturb its operations at all. After I had seen it deposit its eggs, as I supposed, I examined in the day time, to see if I could find them. I had no difficulty in finding them—they were about the size of a pin head but considerably flattened. After noticing the marks on the limb under the glass, I could with ease discover all those marks that were made on my trees, the last season by the bug; and by lifting up the bark, did, in every instance, find the egg. I could also find the places where the bug had fed on the bark of the tree, as it did on the limb under the glass.—From what I have seen of the borer, I have no doubt that it remains in the worm state, three years at least, and perhaps much longer in the tree. I presume the egg is not hatched until the next season after it is deposited. During the last year the borer remains in the tree, it bores up through the wood, leaving but a slight covering of bark over the hole, and remains there while it is passing from the worm to the bug state. When transformed, it readily removes the bark and comes out, leaving a round smooth hole behind, as large, and in some cases larger than the largest nail-gimlet. It has by many been supposed that this hole is the one through which the worm enters the tree; but I am certain from observation that it is not so—it is the hole through which the bug makes his exit from the tree, while the hole below is the one where the egg was deposited, and through which the borings and other matters are cast out.

If a thick coat of lime be kept on the tree from the ground two feet up, from the time the bug comes, out which may be the first of July, though I think not till August, and be kept on until October, I think it will prevent the bug from troubling the trees. I washed some of mine last year in this way, and in no instance could I discover any trace of the bug on them. This wash will not kill those borers already in the tree, but I think it will prevent any more eggs being deposited so long as the trees are coated with lime. This wash assists, also, in discovering the borers which have just commenced their existence; for you will find the lime to be stained with a reddish color over the spot where the borer lies, long before any borings are cast out."

There is another variety of the apple tree borer, which attacks the limbs instead of the trunk. We believe it is not very common, and but little is known of its habits.

PEAR TREE BORER.—The buds of the pear tree are subject to a borer but little known; it deposits its egg in the young flower-bud, and retires to the earth in the fall; it is, however, so seldom multiplied to a great extent, that its effects are more beneficial than otherwise, by hindering too much fruit from being formed, and thus improving what remains.

New Strawberry.

A new strawberry, called the CRESCENT SEEDLING, has been produced by a Mr. Lawrence of New Orleans. The Bulletin says,—"These Strawberries are of a peculiar species; in size, shape and tint; they represent the cultivated or garden fruit, as they are, but they possess all the high flavor of the wild Strawberry, in which the garden Strawberry is so deficient. This variety is as rare as it is superior—it was fiirst cultivated by Mr. Lawrence, and raised from seedlings."

Mr. R. G. PARDY of Palmyra, N. Y., who is a great lover of strawberry culture, (having now in cultivation some forty varieties) thus speaks of this new strawberry through the Rural New Yorker:—"This strawberry originated with Mr. LAWRENCE, 21 Commercial Place, and is a seedling—a cross between the British Queen and Keen Seedling as he writes me, and has this peculiarity in the South wherever tried—it produces a *constant* and abundant supply of large, high flavored, conical, dark red strawberries during a period of *six* or *seven* months from January to August inclusive,—at the end of which time the old plants die out and a few runners strike with which to renew the beds. This has been their constant habit, every year since it was originated some five years ago. The fruit is often of the large size of five and a half inches in circumference and has the very large average of three inches in New Orleans. In May a friend counted 33 to 40 large ripe berries on

a plant, on examining four or five plants in succession.

Mr. Lawrence writes me, this constant bearing of the plant without interruption is its natural habit, for he never cuts off the blossoms, or retards or hastens the bearing of the plant any way. But the same plant has blossoms, green fruit, and ripe fruit at the same time. I have only a lot of plants received here the last of May, and I must therefore get them well rooted, and await another year to see whether or not they will prolong the strawberry season north, during the hot months of July and August. If they do this, they will be truly a great acquisition to the north."

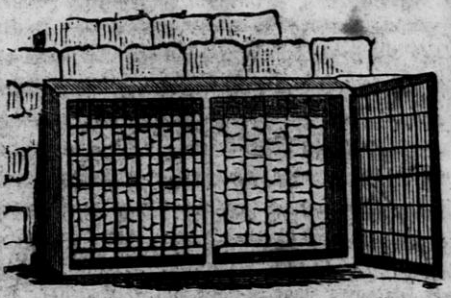
Culture of the Blackberry.

We copy the annexed remarks on this subject from Hovey's Magazine:

"The blackberry is likely to become one of the most esteemed of the smaller fruits. Since the introduction of the improved varieties, about six or seven years ago, of which we have heretofore given several accounts, and whose cultivation has been so well detailed in our last volume by Capt. Lowett, of Beverly, who has been one of the most successful growers of the fruit, it has been very generally disseminated; and the past year many remarkably fine specimens were exhibited before the Massachusetts Horticultural Society.

The liberal premiums offered for this fruit by the society have had the good effect of producing very general competition; and so superior have been some of the specimens—so much larger than when first exhibited, evidently showing what care and attention will do for this as well as other fruits—that the society have deemed it advisable to offer a high prize for a seedling with the hope of still further improvement; for, although what few attempts have been made in this way have not been attended with very favorable results, there is still reason to believe that it will yield to the ameliorating influences of cultivation, as well as the strawberry, the gooseberry, or the raspberry.

Horse Shoe without Nails.—A patent has been issued to Herr. Driesbach for a horse-shoe that can be put on and worn without nails.



Grape Vines Trained Within a Frame.

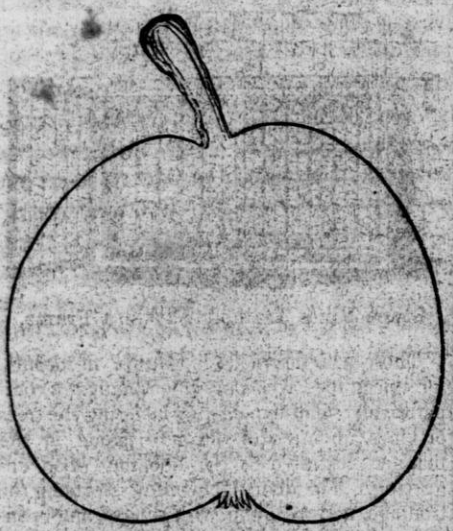
Those who desire early plums, nectarines, foreign grapes, &c., can obtain them at a comparatively small expense, by inclosing the trees or vines upon a wall within a frame in the manner illustrated by the adjoining wood engraving. The doors, or windows, forming the frontage, may be hung with hinges, and opened or shut at pleasure, for the purpose of watering, ventilation, pruning, gathering the fruit, &c. The glass in front, when closed, would not only protect the trees from cold, but would assist in bringing the fruit to maturity and guard it in a great measure from the attacks of flies, wasps, and most other insects, liable to prey upon the trees.

Eggs sent from New Orleans to Europe.—One hundred barrels of eggs were shipped from New Orleans by the Empire City, on her last trip to New York. This is a curious fact in the history of the trade of that city. Cincinnati eggs traveling to New Orleans, fifteen hundred miles, over the gulf of Mexico, and up the Atlantic fifteen hundred more, to New York, thence to be shipped three thousand miles further to Europe, constitutes one of the wonders of commerce.—Such a voyage was hardly contemplated by the respectable hens of Ohio, when they cackled so proudly over their productions in that line. [N. O. Delta.

Strange.—There is a spring of water near Logansport, Ky., which is said to be deadly poison. A bottle of it has been sent to Prof. Silliman for analyzation.

At Franklin, Iowa county, several new leads of lead have been struck, from which pieces of ore weighing 200 and 300 pounds have been taken. The Wisconsin lead regions beat the California mines all hollow.

Schools.—Ireland has 63 agricultural schools; Russia 68; France 75; Bavaria 35; Austria 33; Prussia 32; and Belgium 100. There are numerous others in different parts of Europe.



Kirtland Pear.

This pear was introduced to notice by Prof. Kirtland of Cleveland. It was raised from the seed of the Seckel in 1819, by H. T. Kirtland of Mahoning Co., Ohio. It is an early pear, ripening early in autumn, before the usual pear season. The growth is vigorous, and flavor superior.

To Make Young Pear Trees Bear.

I was afflicted by the sight in my garden for four or five years, of the most luxuriant and thrifty young pear trees, which would not bear, but all their strength ran to wood. Vexed at this, I resolved to try the effect of bending down the branches so as to check the flow of sap and cause them to form fruit buds instead of wood buds. Accordingly, the first week of December, 1847, I filled my pockets with stout twine; I drove down some small pegs into the ground underneath my trees, (which had branched low, so as to make dwarfish heads;) I then tied a string to the end of every long shoot, and gradually bringing down the end of the limb, till it curved down so as to make a considerable bend or bow, I fastened it in that position either by tying the other end of the string to the peg, or to another branch or a part of the trunk.

According to my expectation, the tree next year changed its habit of growth, and set an abundance of fruit buds. Since that, I have had plentiful crops of fruit without trouble—take good care not to let many branches go on the upright system.

[Horticulturist.

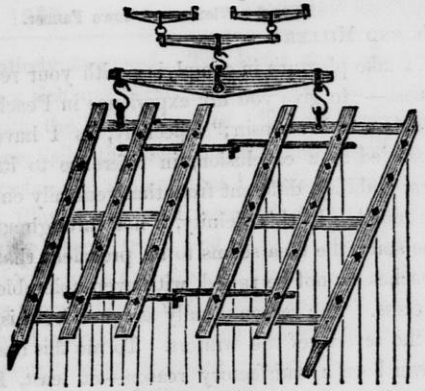
The Culture of Cauliflowers.—"An Old Philadelphia Gardener," in the Western Horticultural Review, giving directions on this subject, says:

From the 15th to the 25th of September sow the seed in an open border. Let the plants remain until the 20th of October when they will be small, having four leaves. Plant them out four inches apart in a pit or frame, where you can protect them from the winter's frost; let them remain there until the first week in January, then prepare your pit to grow them in.

The pit should be eight feet wide, three feet deep in front, and four feet at the back. Get one load of leaves and one load of hot stable manure—I mean in this proportion; have the leaves and manure well mixed a week or two before you intend to use it, and then fill the pit to what will settle down to twelve or fourteen inches; take then and get your soil, old sod three parts, and one part manure; hog manure is the best; cover your bed over to the depth of at least eighteen inches, dig it nicely, then put on the sashes and keep them close for three days, when the little heat that the manure and leaves have created will be sufficient to give the plants a start. This is all that is necessary, for if there be too much heat it will spoil all. Then mark out your bed, two rows to each sash which should be three feet ten inches and two inches for the wood-work of the rafters.

It will be understood that the plants were pricked out in rows, so that they could be taken up with the trowel without breaking any of the ball; set them five plants in the row, and two rows of each sash; you may plant lettuce between each plant in the row, and a drill of short-top turnip radish between them.—After you have all planted, let the sashes remain close for a day or two, when they will begin to show they have taken to the ground. You must then give all the air you possibly can, even taking the sashes entirely off in good weather. They must be covered every night with straw mats and shutters until the first of March, or longer, according to the season.

By the 10th of March they will require to be watered twice a week; leave off the sash every day you can; by the first of April give plenty of water, and by this means you can grow early cauliflowers as good as in any part of the world. I have grown them four, five, and nearly six pounds. For the truth of this statement as to weight, &c., I refer you to the Transactions of the Pennsylvania Horticultural Society from 1833 to 1836, both years included. I took the premium so long as I cultivated the cauliflower.



Harrowing.

The harrow is one of the most useful implements that the farmer uses in preparing the soil for his crops, and covering all seed sown broadcast. All are aware that like other tools, the mode of constructing a harrow has much to do with the efficiency of its work; but perhaps it has never occurred to many, that the speed with which the harrow is drawn through the soil, has any thing to do with the perfectness, with which it pulverizes and levels the soil. Upon this point, and the proper weight that a harrow should be made, we subjoin the remarks of Mr. Ransom, in his treatise on the "Implements of Husbandry:"

"It is admitted, by all acquainted with the subject, that harrowing, especially on heavy soils, is the most laborious operation on the farm—not so much, perhaps, on account of the quantum of power requisite for the draught, (though this is sometimes considerable,) as for the speed with which the operation is, or ought to be accompanied; and yet it is frequently left to the charge of mere boys, and sometimes performed by the worst horses on the farm.

"If we examine a field, one half of which has been harrowed with weak, inefficient horses, and whose pace was consequently sluggish, the other half with an adequate strength and swiftness of animal power, we shall find the former will be rough and unfinished, the latter comparatively firm and level, and completed in what would be called a husbandry-like manner. Scarcely anything in farming is more unsightly than the wavy, serpentine traces of inefficient harrowing. The generality of harrows appear too heavy and clumsy to admit of that despatch without which the work cannot be well done; and though it is evident that different soils demands implements of proportionate weight and power, yet, for the most part, harrows have been rather over than underweighed, particularly when employed after a drill, or to bury seeds of any kind.

"Harrowing has been so long regarded as an operation which must be attended with considerable horse-labor, that attention does not appear to have been sufficiently turned to the inquiry whether this labor might not be greatly reduced, by lightening the instruments with which it is performed. Many would be surprised at the amount of reduction of which seed-harrows, at least, are capable, and, where land is clean, to see how effectively a gang of very light small-toothed harrows may be used."

A gang of harrows is made after the manner of the Scotch Harrow, an engraving of which heads this article. They are formed by coupling together, side by side, two or more single harrows, so as to form one of any width desired.

For the Wisconsin & Iowa Farmer.

Potato Rot.

Friend Miller—Much has been said within the last few years, upon the subject of the potato rot; but no one has yet ascertained to "a demonstration," the true cause of that disease; and consequently no certain remedy has been discovered, as the first duty of a physician is to locate and define the disease which he wishes to treat. Andrew Jackson Davis, in the first volume of his Great Harmoned, page 389, makes the following remarks upon this subject: "In reviewing the general causes of the Asiatic pestilence, we gain explanations concerning the phenomenon of the recent *potato rot*; and also why the magnetic telegraph refuses, at times to transmit impressions from one station to another, through the atmosphere. All that has been hypothetically advanced by scientific agriculturists and chemists, is far from furnishing a solution of the problem of the sudden decay of the pota-

to plant. Indeed, they have signally failed in their attempts to ascertain the hidden causes, which are in fact, neither foreign nor difficult to comprehend. They are these: the inferior portion of the electric fluid which is in the lower stratum of the atmosphere, (especially when the negative state is existing, permeates everything upon the surface of the earth, and more particularly and thoroughly those localities where it is in a greater and stronger state of concentration. And the result of this permeation or saturation of the electric fluid, is a quicker and unnatural motion among the particles of the organized substance. This quicker motion generates inward heat, this fever, and this produces decomposition. Hence the potato decays rapidly. In fact, *the atmosphere has had the cholera*, more or less, for thirty years, (and will continue to have it until there occurs a geological change in many portions of the earth,) and from the atmosphere the disease has been, and is, communicated epidemically to the predisposed potato plant, and also to the human system."

Whether Mr. Davis' theory is the true one or not, I leave to the investigation and decision of scientific men. Mr. D.'s remedy is the application of substances qualified to *absorb the abounding electricity*, such as blacksmith's cinders. If his theory is true, it ought to be generally known ; and if false, it should be exploded. If true what substances will absorb the abounding electricity? The discovery of a *certain* remedy for the potato rot would immortalize the discoverer. I hope to see something upon this subject in the columns of the Farmer.

Yours very truly,
SOLOMON LOMBARD.

Green Bush, June 30th, 1852.

LIME.—One farmer saved his clover from destruction by the slug or small snail on land bearing a wheat crop, by slight dressing of powdered lime scattering through a clover seed machine late in the evening when the insects were busy at work. Lime would be useful if applied in this manner. Sown in moderate quantity on light land, it will bring in white clover ; it is said also that it will destroy fungus which causes the rot in potatoes.

[Exchange.

For the Wisconsin & Iowa Farmer.

FRIEND MILLER:

I take pleasure in complying with your request—"to give you my experience in Peach Culture in Wisconsin;" especially, as I have been led to a conclusion, in reference to its practicability, different from that generally entertained. In this vicinity, if not throughout the state, the idea seems to be prevalent that peaches cannot be raised, with even tolerable success. The reason usually assigned for this, is the severityof the winters. To me this has never been a satisfactory reason—at least, I have been unwilling to believe that a region of country, possessing a soil of such great productiveness, and blessed, withal, with such genial skies, should fail to produce, *with suitable cultivation*, all the varieties of fruit, common to this latitude, and especially, the wholesome and delicious peach. Besides, in the eastern states, they are cultivated successfully, and on every variety of soil, in even higher latitudes than ours; and where, according to the theory of the isothermal line, the climate must be colder than it is here. Indeed, my own experience has convinced me that the difficulty exists in the fertility and great productiveness of the soil, rather than in the climate.

Peach trees, planted in cultivated ground and carefully nursed and tended, blossom so early that they are in danger from the later frosts of spring, and grow so rapidly, that they become, *in size*, very respectable trees, in a single season. But of necessity, their vigor and maturity, cannot correspond with their size. This is a fact that all must have noticed. And it must be evident, that wood thus rapidly formed, must be tender, and liable to injury from severe cold.

The question then suggests itself, would such a method of cultivation, as would retard the growth of the tree, and delay, somewhat, the period of blossoming, prove successful?

I have now a number of trees, which I cultivated in such a manner as to produce a slow and hardy growth, and they were not injured by the severe cold of the past winter; while a large number of other trees, of the same kinds, and in the same garden were

entirely destroyed. The latter were planted in a rich and highly cultivated soil, and grew with the usual rapidity. The following is, essentially, the method that I have found successful, and the one that I would recommend.

Plow the ground intended to be planted with peach trees, and seed it down with Herd's grass and clover. This should be done as thoroughly as if the design were to make a good meadow. I would do it though the ground were unbroken prairie, because the turf, thus obtained, is much heavier and firmer, than that of the wild grass. After the ground has become well sodded, plant the trees, without manure or other fertilizing substance, and let the grass grow close about them. The firm and heavy turf, thus pressing upon the roots, and turning off the moisture of the summer rains, will retard the growth of the trees; and usually, to such a degree, that the amount of wood produced, will attain sufficient maturity and perfection, to enable it to withstand the cold of winter. This method also delays the blossoms, and lessens the danger from late frosts.

I think the system here indicated—varied, perhaps the better to adapt it, to the different kinds of soil, and to different exposures—will be found to answer the purpose intended.—At all events, I am satisfied, that this, or some other method, that will produce a similar effect, will be found successful.

I cheerfully recommend this to the readers of your paper; and I shall be glad if they derive any benefit from it, or find in it a good suggestion. Yours, &c.,

HIRAM TAYLOR.

Janesville, Aug. 12, 1852.

NEW SUGAR PLANT.—Representations have been made by a cultivator in the Rhine Provinces, that he has in his garden a bulbous plant, called the "Russian Potato," four or five feet in height, and yielding a third more sugar than the beet root. It must be of inestimable value to a region unfavorable to the growth of the beet, and it is afforded at a much cheaper rate. [English paper.

Unjust riches curse the owner in getting, in keeping, and in transmitting. They curse his children in their father's memory.

THE GREAT POLAR OCEAN.—At the late meeting of the London Geographical Society Lieut. Osborne, a member of one of the British Arctic expeditions, argued, at some length in favor of the support of the existence of a great Polar Ocean. He said that in Wellington channel, he had observed immense numbers of whales running out from under the ice, a proof that they had been to water and come to water. He further said that there were almost constant flights of ducks and geese, from the northward, another proof of water in that direction, since these birds found their food only in such water. He added that it was his deliberate opinion, from observations made on the spot, that whales passed up Wellington channel into a northern sea. In reference to the abundance of animal life, in the latitude of this supposed Polar sea, he remarked that while on the southern side of Lancaster Sound, he never saw game enough to keep his dog; Melville Island, one hundred and fifty miles to the northward, abounded in deer and musk oxen. It was clear he continued that animal life did not depend on latitude, but increased, if any thing, after passing the seventieth degree. Moreover, while in Baffin's Bay the tide made for the southward coming from the Atlantic, in Barrow's Straits it made for the northward, which could only be explained on the hypothesis of a sea in that direction. All this seems to us proof on proof of a great Polar Ocean.

LONGEVITY OF THE HORSE.—It has long been the impression that the ordinary duration of a horse's life is much shorter than it ought to be, and that the excess of mortality is the result of ignorant management. The great error consists in regarding the temperament and constitution of the horse as altogether different from those of human beings; whereas, they are precisely the same in all important respects. Disease, arising from excessive fatigue, over heating, and exposure to the air, want of exercise, and improper diet both as respects quality and quantity, and from many other causes affects the horse and his master alike, and neglect in either case must terminate fatally. Indeed, when a man or horse has acquired, by a course of training, a high degree of health and vigor, the skin of either, is an invariable index of the fact.

[Am. Vet. Jour.

EFFECTS OF IRRIGATION.—Water applied to the soil by irrigation gives many other things beside humidity; it manures, consolidates, deepens the staple, or surface mould, and guards against cold—effects as obvious in a northern, as in a southern climate.

EDUCATIONAL.

CONDUCTED BY J. L. ENOS.

[Continued from page 164.]

School Celebrations.

The simple anunciation of the fact that such a celebration will be held in every town in the state during each term of the schools, or near the close of both the summer and winter terms, will prompt to such increased exertion on the part of teachers and pupils, to sustain the reputation of their respective schools, as cannot fail to elevate the character and rapidly advance the cause of popular education.

Such assemblages of parents with their children, who are soon to be the property-holders and directors, the fathers and mothers, the farmers, mechanics and business men, the citizens and legislators, the executive and judicial officers and the future instructors of our country, convened with specific reference to their preparation for the scenes and relations of their future life—Such exhibitions of our future republic in miniature cannot fail to excite and bring into vigorous action some of the noblest and most powerful impulses of the human heart—enlist all that is noble and generous in their parental affection and patriotic devotion to the welfare of posterity and the country, on the side of thorough and universal education, and awaken that deep and all pervading interest on this subject, which, if properly directed, will result in a thorough regeneration of the whole school system.

It may not be inappropriate in this place to append a few hints in relation to the management of such celebrations:

1st. The teachers who are to engage in the celebration should be consulted, and their cordial co-operation previously secured.

2d. Great care should be taken to guard against everything that may result in the mortification or disappointment of either teachers or their pupils, and to do this, the Town Sup't and Teachers should have a meeting, and, as far as possible, arrange the order of exercises for the day, which should be strictly adhered to at the examination.

2d. The exercises should be so conducted as to be fit models for imitation in the schools.

4th. In all cases the teachers should alternate with each other at each exercise.

5th. Music by the pupils or on instruments should be occasionally introduced between the other exercises.

6th. One address, at least, should be delivered to the people on all such occasions.

It is believed that by observing these or somewhat similar rules, school celebrations may be rendered highly interesting to all concerned, and their anticipated beneficial results fully realized.

We therefore cordially recommend superintendents and teachers to endeavor to secure the holding of one such celebration, at least as often as each year in the respective towns in which they belong.

The Noblest Object for the Regard of the Legislator.

This is, without doubt, *the* department of public education. By advocating the interests of this, he advocates the interests of the whole community, and especially does he support the rights of those who cannot advocate their own. In nothing, then, can he exhibit more true patriotism; in this case also, as in every other which regards the public good, he supports, in the most powerful manner, his own interests.

In what way can a legislator claim or expect so large a reward as for his efforts in behalf of popular education? He advocates interests which have no opposing interests which dare speak—he advocates interests which lie deep in the warmest part of every parent's heart—he advocates the interests of those who are growing up to be the public, and whose opinions and feelings will control the estimate which society forms of a man. Where is the man who ever lost favor by sustaining the cause of public education? Where is the man who has not been exalted to the highest degree by espousing this glorious cause?

If then a legislator were a mere demagogue, which God forbid any future legislator should be, what could he do to gain his ends, so well as to continually make the department of education his hobby? Nothing would answer so well except that to be truly powerful in connection with that cause; his heart must be in it.

No superficial interest will do. The man who advocates the cause of children must love them and their interests—he must love the public good—he must love to enquire into the necessities of our schools, and to devise means to meet and relieve them. Then shall he be great among the people ; the children shall learn to love and honor him, and when he needs their grown up aid, he shall not be obliged to beg for it, but he shall be seized by those who love him, and upon their shoulders shall he be exalted to the high honor he so justly merits.

Convenient and Attractive School Houses.

The necessity of attractive and convenient school houses is so obvious, that we pass by much that might be said on the importance of well-constructed school-houses, to dwell for a moment upon one single thought connected with the subject.

Were there no other consideration to be taken into view in making school-houses of symmetrical proportions, in keeping the paint fresh and the windows whole, in furnishing blinds, in inclosing ground, and (when practicable, as it always is in the country,) in cultivating ornamental shade trees, that of the influence of these external arrangements on the tastes and character of children is too important to be overlooked.

Character is indeed chiefly formed by the influence of mind upon mind ; yet we are so constituted in relation to the external world, that matter has much to do in determining human character, and particularly in the formation of taste. Beauty, order and grandeur in external forms affect the mind and shape the character. The tastes of children are early formed, and it is of vital importance to their happiness and usefulness in life, that their tastes be developed judiciously. Book knowledge is a small part of education. The very term education implies something far beyond. It is the leading out of the mind, the cultivation of the heart, the discipline of the young powers by every gentle appliance, the rousing of the energies to healthful and increasing action. With these, the outward world, externals have much to do. The character and taste of a child are strongly influenced by his associations with the place where he learns his alphabet, cons his simple lessons, and spends so important a period of life in preparation for the active duties of a citizen. Let not these be gloomy but pleasant. Let no parent or teacher leave his child or pupil to suppose that the great end of school-going is to enter a desolate house, to sit still on a bench with arms folded, or fingers dove-tailed, in mortal fear of punishment if he fail of these. Rather let parent and teacher make the school house and all its environs attractive to the child and pupil. Let the observant eye of the child rest on what is neat and tasteful.—Let not his original susceptibility of beauty be crushed, but tenderly quickened and influenced. Let him be surrounded by objects which shall call forth to bless his life

"The form of Beauty smiling at the heart."

Next in vividness to the memories of our childhood's home, are those of the place where we first went to school. They loom up in the retrospect of our lives with distinctness and reality. The aged man who has forgotten, perhaps, the events of the last week or year, remembers and will never forget the place of his school days—so strong is the recollection which the children of our Commonwealth will retain, scores of years hence, of the several places where they now learn the rudiments of knowledge.

If, therefore, parents and teachers would paint a picture on the immortal canvass of a young mind, of which they will not be ashamed, next to having homes comfortable and tasteful, let them make the school-house neat and attractive. There will be found in every community, individuals who attach little importance to this subject. The reason for this may in part be attributed to the unfortunate circumstances in which their own early feelings and tastes were developed. May they not have suffered through their whole lives from undeveloped and misguided tastes. If their only associations with school houses are of dilapidated walls, broken windows, smoky ceilings, soiled floors, whittled desks, and uncomfortable seats, it is not strange. Yet such persons, on reflection, may, perhaps see with more clearness the justice of this subject, as travelers in foreign lands, rich in all that is gloriously luxuriant, appreciate far more each sunny hue, melodious sound, and lovely configuration, than they who have dwelt their lifetime among such scenes.

Knowledge of books in recluse men, is like that sort of lantern which hides him who carries it, and serves only to pass through secret and gloomy paths of his own ; but in the possession of a man of business, it is a torch in the hand of one who is willing and able to show those who are bewildered, the way which leads to prosperity and welfare.

[Spectator.

Lead is looking up at St. Louis. The last sales reported, are quoted at $4,30 for pig.

EDITOR'S TABLE.

F. W. Howland, Book Seller, is our authorized agent for the City of Racine, to whom we wish those in arears, would hand the amount of their subscription.

Death of A. J. Downing.

DOWNING IS DEAD—a great national calamity, irreparable and utterly unexpected.—In the prime of life, and the fullness of health and increasing usefulness, he has fallen a victim to the rashness and folly of irresponsible steamboat officers.

A. J. DOWNING—Editor of The Horticulturist and author of text books of Pomology, Landscape Gardening, and Rural Architecture—was one of the fated sufferers on board the Henry Clay; and in losing him, the Horticultural world has lost a man, whose place, on this side of the Atlantic, no one will scarce have the vanity or the presumption to deem himself able to fill, in a manner worthy of the memory of the dead.

He was the only man in America known to unite in an eminent degree, the most general and particular information, and the most exquisite and highly cultivated, yet simple and natural taste, in all things connected with rural art and rural science.

He excited no jealousies, because he was above them—He was the involuntary and universally acknowledged Chief of our ancient brotherhood, and the presiding Genius of our new science of the cultivation of the earth, and the creation of the beautiful and useful, to add to the comfort and increase the delights of our HOMES. Alas, that such a man should die! And die so young.—The old fall as naturally into the grave as the seed into the ground—but the wisdom of man is lost in the attempt to look behind these inscrutable dispensations of Providence.

WATERTOWN FARM IMPLEMENTS.—Watertown, in this State, is becoming as much celebrated for the manufacture of all kinds of Agricultural Implements as Rochester is for her Edge Tools. Watertown has several manufacturing establishments which in the aggregate are turning out every thing in the line of tools and implements, from gimlets and jack-knives up to Horse Powers and Threshing Machines.

Among these establishments we would notice that of Messrs. Keyes & Granger, for the manufacture of Hoes, Forks, Plows, &c. They have in their employment Mr. I. Shaw, who is reputed to be one of the best plow makers in the State—Messrs. K. & G. have just favored us with a sample of their handi-work, in a beautiful Hay Fork, which in point of finish, model and durability, we think cannot be excelled. If our memory serves us right, Messrs. Keyes & Granger received the first premium on forks at the last State Fair, and also on some other articles. The Farmers of Wisconsin have no occasion to send abroad for implements, while we have such establishments at home, as may be found at Watertown.

THE BERLIN MESSENGER.—Is the title of a new political paper, hailing from Berlin, Marquette County—Bugh & Kimball, Editors and Proprietors. The Messenger is a large sized sheet—neatly arranged—Whig in Politics—and judging from the ability displayed in the numbers before us, will render good service to the cause of its party. Mr. Bugh was formerly connected with the Madison Statesman, one of the best conducted Newspapers in the State.

HUNGARIAN SNOW WHEAT.—We have received, since harvest, samples of Winter Wheat from various parts of the State, which will stand comparison with the far-famed Genesee valley production. The handsomest specimen which has come to hand yet, is from the Farm of Dr Platt of Sheboygan County, called the *Hungarian Snow Wheat.* Dr. Platt informs us that this is a new variety of wheat lately introduced into this country—that it will produce some six lbs. more flour to the bushel than any other kind he has ever seen. We have received from Dr. P. 2½ bushels for seed.

LARGE TOBACCO LEAVES.—Mr. Chas. Utter of Fort Atkinson, has presented us some of the largest and finest appearing tobacco leaves we have ever seen. They are of mammoth size—measuring, some of them, 3 feet in length by 1½ feet in width. Mr. Utter is cultivating three-fourths of an acre of this variety, which he calls the *Connecticut Seedling*, and which he estimates will yield about 2000 lbs. per acre.

COUNTY FAIRS.—The Agricultural Society of Rock Co. will hold its annual Fair at Beloit on the 28th and 29th days of September.

Racine Co. Fair also occurs at the same time and is held at Searles' in Yorkville.

WISCONSIN STOCK FAIR.—The second semi-annual Stock Fair of this state, will be held at Taycheedah on Wednesday, October 11th. The beneficial effects of these Fairs of our State Stock, will be appreciated by those farmers who regard their true interests, whether as buyers or sellers. And we hope the liberal projectors of this enterprise will be well sustained. We think our people would find their interests subserved by the establishment of periodical market-days in all the principal towns in our State, for the sale and exchange of their productions.

POTATO ROT.—We have observed, within a few days, the appearance of the potato rot among the early potatoes. We hope it may be confined to them. [Racine Adv., July 28th.

IRON IN PENNSYLVANIA.—It appears not to be generally known to what an immense extent the manufacture of this universal metal is carried on in this state. Pennsylvania now produces as much iron as was manufactured in all Great Britain thirty years ago. Compared to the present manufacture of the article in France, that of Pennsylvania is at least equal—it is more than Russia and Sweden united; and exceeds that of all Germany. [Phila. Ledger.

FINE WHEAT.—A bunch of twenty-five heads of wheat has been shown to the editor of the Newberry (S. C) Sentinel, by Gen. James H. Williams of that town, which the Sentinel says is hard to beat. The heads are from six to seven inches in length; and the one has shelled sixty-one heavy, well filled grains. The seed from which this sample was grown was brought from Mexico by Gen. Williams, on his return from the late war. It may be sown about the first of December, and it matures about one week later than May wheat.

AUSTRALIAN WHEAT.—We have before spoken of some Australian wheat sent us by Mr. Almon Hays of Sharon. During the last week we have seen further specimens of the grain from his field. They ranged from six feet to six feet four inches in height very large heads and the grains fully twice as large as any we ever saw before. Mr. Hays thinks that in any ordinary season a crop of 40 to 50 bushels per acre may be reasonably expected. [Mansfield, O., Herald.

A GOOD CEMENT.—I have found gum shellac, dissolved in alcohol, very excellent for joining broken vessels; it makes them nearly as durable as if they were cemented by heat. I have been using for years, a mortar which was broken and mended in this manner. It was broken in pieces, and could not be then replaced. I applied the gum, and bound the parts firmly together until the cement was perfectly dry. I then put it in use and have continued to use it ever since. [Scientific American.

MANURE FOR MELONS.—The best is pigeon dung, and from the use of this, it is said the Persian fruit derives its superiority. Hen dung is probably next in value, and after this guano, which is the manure of sea fowl.

WASHING LACE.—I have lately used the following method of washing lace, collars, and find that it not only makes them look well, but saves much of the wear and tear of other washing: Cover a glass bottle with calico or linen, and then tack the lace or collar smoothly upon it, rub it with soap, and cover it with calico. Boil it for twenty minutes in soft water; let all dry together, and the lace will be found to be ready for use. A long piece of lace must be wound round and round the bottle, the edge of each wound a little above the last and a few stitches to keep it firm at the beginning and end will be found sufficient, but a collar will requiie more tacking to keep it in its place.

Coal has been found in considerable quantities at Portsmouth, R. I. A company is now engaged in working it. The coal is 25 feet thick, and resembles the Pennsylvania products,

The Woodstock (Vt.) Tenth Legion says there has not been for years such a prospect for a large crop of corn in that country as there is now.

CORN.—The corn crop of this county wears a promising appearance. Heavy yields will be gathered. [Fond du Lac Jour.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., OCTOBER, 1852. NO. 10.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER.

TERMS:

50 Cents a Year in Advance;

Five copies for $2, if directed to one Post Office, and at the same rate for a larger number. All subscriptions to commence with the volume. Back numbers supplied to new subscribers.

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Eighth page	10
One square, (twelve lines or less,) 1 year	6 50
(Less than one year,) for first insertion	2 50
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OFFICE.—Empire Block, Main St., in the rooms occupied for the office of the Janesville Gazette.

DEFERRED ARTICLES.

The National Agricultural Convention.

This convention, of which we gave notice in our June issue, met at Washington, as appointed; and considering the limited notice, which was given, a respectable number of delegates were present. We have not as yet, (August 10th,) received any official report of the transactions of this body, but have collected so much of its proceedings as we could, from various sources.

A NATIONAL AGRICULTURAL SOCIETY was formed —a constitution adopted—proper officers chosen, and other measures discussed, ostensibly, to promote the best interests of the society and the cause in which it is engaged. But we more than suspect, that self-aggrandizement was the motive that promoted this display of good will towards the farmer's interests. It seems that several members of Congress, (being already in Washington,) were appointed to attend the meeting as delegates, and several others, prompted by an overflowing zeal in the cause, saw fit to make themselves quite conspicuous, by occupying the time of the convention in discussing such matters as came before it —in fact, if report be true, there was a complete stampede of members from the halls of legislation. A great diversity of opinion existed among this portion of the delegates, as to the best course of action to be pursued, as is shown by the speeches made, and plans proposed.

This demonstration on the part of members of Congress, has convinced us more than ever, of the emptiness of their professions of regard for the Agricultural Interests of the country, and of their utter incompetency to perfect any measures, as a body, calculated to benefit this department of our industry. The fact that each member of Congress who spoke, proposed a plan of his own; proves to us, that they acted upon the spur of the moment—that there was no harmony of thought or action among them, upon any plan to carry out the objects of the convention—and that, notwithstanding the attention of Congress has been called to this subject, by every administration, for more than half a century—these servants of the people are still wofully and disgracefully ignorant of what should be done to protect this important interest.

The committee on organization made a majority report, and Judge Douglass preseted a counter, or minority report. One or two day's debate ensued, in which the Tariff, Land Distribution and some other questions, just as foreign to the occasion, were discussed, when the debate was brought to a close by adopting the following *masterly* resolution:

"Resolved, That this Convention respectfully request Congress to take action upon the subject of Agriculture, and afford such efficient aid, as in their wisdom shall be best calculated to advance the great interests of that branch of industry."

The Working Farmer, Edited by Porfessor Mapes, in commenting upon the proceedings of the convention and the disregard with which Congress has treated the farming interest, very justly remarks: "Have we not exercised our politeness in waiting for the superior judgment of Congress to apply itself to the protection of agriculture and its advancement, long enough? From the days of Washington, who recommended an Agricultural Department, to the present time, we have been amused and put to sleep by such expressions as those recommending the Convention to await the wisdom of Congress, without suggesting a plan of operations.

Agriculture either is or is not more important than any other of the great interests; and if it is, we should ask our representatives in Congresss to establish an Agricultural Department, equal in position with that of any other department of the government, and we should not ask them to establish it as an appendage to any other department. It has been located in a cellar room of the Patent Office, with an organization resembling that of a garret room to a seed-selling establishment, rather than the representative of the great

interest of Agriculture. Congress will give the farmers no more than they ask for, and therefore they should ask for no less than they desire, nor should they be so much afraid of giving offence to Corgress, by stating precisely what they do want. If the wisdom of Congress, in its full exercise for more than 50 years, urged by the messages of presidens and by the bombastic praise of the farming interest by its members, have failed to establish an Agricultural Department, how can we hope that they will do so from a mere suggestion. If you ask for a Department, they may give you a Bureau under the control of a commissioner of some other department; but demand a department with a Secretary of Agriculture holding equal rank with the Secretary of War and the Secretary of the Navy, and accept of nothing else, and they must eventually yield to the propriety and necessity of the case. It is useless to withhold the fact, that farmers, like other citizens, have rights, and these rights have not received the same advantages from government as have been awarded to others, and our politicians may rest assured, that unless they act and that speedily, they will find that four-fifths of the community can present a party, with the establishment of an Agricultural Department as their aim, superior in principles, and equal in talent to any party now existing.—Patting on the back may induce a lion to sleep until he becomes hungry, but it is dangerous to attempt to amuse him when his appetite, and his supposed rights, both prompt him to action. It was the last straw that broke the asses back, and the load heaped upon our farmers, of political indignity and legislative indifference, is nearly as complete."

However, we are gratified to learn that a National Agricultural Society was formed and to notice amongst the names of its officers, those of Hon. Marshall P. Wilder as President, and Dr. Daniel Lee as Corresponding Secretary. Better selections could not have been made, to fill the offices of President and Secretary. They are men who have at heart the best interests of the society—men who have labored long and zealously in the cause, for the advancement of which, the society has been organized. Below we give the constitution, and a list of the officers of the society for the current year.

CONSTITUTION.

Section 1. The name of this association shall be "The United States Agricultural Society."

MEMBERS— DUES.

Sec. 2. The society shall consist of all such persons as shall signify to any officer of the society a wish to become a member, and who shall pay two dollars to the treasurer of the society and a like sum hereafter, and of delegates from the state agricultural societies in the States and Territories and District of Columbia, who may be appointed to attend the annual and other meetings of the society, and who shall pay the like sum, and also of such honorary members as the society may see fit to elect. Each member shall be entitled to receive a journal or publication of said society, containing an account of its proceedings and such additional matter as may be deemed worthy of publication, free from any expense except postage. Twenty-five dollars shall entitle any one to the privileges of life membership and exempt him from any annual taxation.

OFFICERS.

Sec. 3. The officers of this society shall be a President, a Vice President from each State and Territory in the Union and from the District of Columbia, a Treasurer, a Corresponding Secretary, a Recording Secretary, and a Board of Agriculture, to consist of three members from each State, Territory, and the District of Columbia. to be appointed by the Executive Committee of the societies of such States, Territories, &c., and where there be no such State Societies to be appointed by the Executive Committee of this Society. The President of the society, shall be *ex-officio*, a member and President of this board and of the Executive Committee.

DUTIES OF OFFICERS.

The President shall have a general superintendence of all the affairs of the society. In case of his death or inability to discharge the functions of this office, the Board of Agriculture shall select a Vice President to act in his stead, and clothed with the same power, and shall perform the same duties as the President until the next annual election.

Vice Presidents.—It shall be their duty to advance all the objects of the association, in their several districts; to explain to agriculturists the character and objects of this association and endeavor to gain their co-operation and support; to watch the advance of practical agriculture, and to make known the results of the same by report or otherwise, from year to year.

Board of Agriculture.—It shall be the duty of this Board to watch the interests of agriculture, as they are or may be affected by the legislation of the country, and to make such reports, memorials and recommendations as may advance the cause of agriculture, and to promote and diffuse agricultural knowledge; to examine, and when necessary, report upon the practicability of establishing agricultural schools, colleges, and model farms; to set forth the advantages of agricultural and geological surveys, and to show the importance of the application of science to agriculture; to represent throngh their reports the relation of our agriculture to that of foreign countries and to endeavor to obtain information from such countries, to point out the advantage of introducing any new staples, seeds and plants, to obtain, so far as practicable, annual statistical returns of the condition of agriculture throughout the different states—all which information shall be published by said society, and form part of its transactions.

The Executive Committee shall transact the general business of the society; it shall consist of five persons, who shall designate the time and place for exhibitions, regulate the expenditures, and take such supervisory charge of the business of the society as may best promote its interests.—This body shall elect its own chairman. Three members shall constitute a quorum.

Treasurer.—The Treasurer shall keep an account of all monies, and shall pay bills only after they have been audited by the Corresponding and Recording Secretaries, and a member of the executive committee, and countersigned by the President of the Society or the Chairman of the Executive Committee.

Corresponding Secretary.—The duty of this officer shall be to correspond with persons interested in agricultare: at each stated meeting he shall read such portions of this correspondence as may be of general interest; and it shall be his duty to carry out and advocate the views of the Board of Agriculture in obtaining, arranging and publishing any information they may desire to have laid before the agricultural community.

The Recording Secretary shall keep the record of the minutes of the Society, and of its Executive Committee.

Sec. 4. The annual meetings of this society shall be held at the city of Washington on the first Wednesday of February, in each year, when all the officers of the society for the ensuing year shall be elected by ballot. The executive committee, however, shall be competent. with the approbation of the society, to appoint occasional meetings to be held at other points. Fifteen members shall constitute a quorum for business.

Sec. 5. This constitution may be altered at any annual meeting, by a vote of two-thirds of the members in attendance, provided not less than fifty be present.

OFFICERS FOR THE PRESENT YEAR.

PRESIDENT:

MARSHALL P. WILDER, of Massachusetts.

VICE PRESIDENTS:

Ezekiel Holmes, Maine,
G. W. Nesmith, New Hampshire.
Henry Stevens, Vermont,
B. V. French, Massachusetts,
Josiah Chapin, Rhode Island,
S. D. Hubbard, Connecticut,
Henry Wager, New York.
Thomas Hancock, New Jersey,
Frederick Watts, Pennsylvania.
Peter F. Causey, Delaware,
W. D. Bowie, Maryland,
G. W. P. Custis, Virginia.
Henry K. Burgwin, North Carolina,
John Whiterspoon, South Carolina.
Thomas Stocks, Georgia,
Richard Jones, Alabama,
Alexander A. Beques, Mississippi,
A. B. Roman, Louisiana,
Frederick Kensman, Ohio,
Robert Mallory, Kentucky,
John Shelby, Tennessee,
John L. Robinson, Indiana,
Stephen A. Douglas, Illinois,
R. Atchison, Missouri,
T. B. Flurry, Arkansas.
James L. Conger, Michigan,
Simmons Baker, Florida,
Thomas A. Rusk, Texas,
W. F. Coolbaugh, Iowa,
James D. Doty, Wisconsin,
Killburn W. Boggs, California,
J. F. Callan, District of Columbia,
S. M. Baird, New Mexico,
Alexander Ramsey, Minnesota,
Joseph Lane, Oregon,
Joseph L. Hayes, Utah.

EXECUTIVE COMMITTEE:

C. B. Calvert, Maryland,
James A. King, New York,
Alfred L. Elwin, Pennsylvania,
W. B. Newton, Virginia,
J. D. Weston, Wisconsin.

CORRESPONDING SECRETARY:

Daniel Lee, Georgia.

RECORDING SECRETARY:

Robert C. Walker, Pennsylvania.

TREASURER:

William Selden, Dist. of Columbia.

For the Wisconsin & Iowa Farmer.

Wintering Sheep.

M. MILLER, Esq.—Dear Sir: When the Farmer first came out, in Racine, I took five copies of it, but on account of its treating so much on different subjects aside from wheat I had no taste to read it much. Wheat! Wheat!! Wheat!!! was the order of the day with me. I kept raising the rotten stuff until I found out that I would be a goner as a farmer unless I turned my attention to something else. Last summer I conversed frequently with Mr. Reuben M. Norton of this city, in relation to wool growing so that I made up my mind to try this branch of business. I went to work and sold some mortgages I had, drawing 17 per cent. to get money to buy some sheep. I bought 340 last October—took as good care of them last winter as I knew how, being entirely a stranger to this business. I got through the long and cold winter pretty well. I sold my wool, or contracted for it last March for 28 cents per lb., which brought me nearly $300. My wethers are doing well—some of them will weigh from 75 to 80 lbs.—fat—and according to prospects now, will fetch in the fall from $2,50 to $3,00 per head and upwards.

The way I fed my sheep, last winter was as follows: In the morning one meal of oat straw—at noon hay and about a jill of wheat tailings, and all the water they could drink, (which is a large quantity in a dry time)—At night oats straw and hay, and plenty of wheat straw to pick over. I found they would consume a great deal of it—say the heads and leaves and trample the stems for manure. Some of my neighbors fed their sheep wholly on hay, but they came out no better in the spring than mine. What I gave my flock could not be disposed of in any other way. One thing I would recommend to all who undertake to winter sheep, that is to shelter them from storms and above all things, make your sheds dry and warm over head with plenty straw under foot. I made sheds on all sides of the yard, but they leaked over head which proved very uncomfortable and injurious to my flock one night last March. The rain poured down in torrents for a time and then commenced freezing hard when the sheep were wet to the skin. The consequence was that many of my best sheep were taken with diarrhea and lost much of their wool.

Now sir—my conclusion is this, in relation to your worthy Farmer;—that *every* farmer in Wisconsin and elsewhere in the Northwest should take and read it for their own benefit, because I am convinced that the best and safest way is to raise a variety of things than to depend entirely, as we have done, on one thing (wheat!) or any other single branch of farming. We have fiddled long enongh on one string and a poor one at that, to begin to add to its number. I now like your paper because it treats upon every farming subject that we are interested in.

Yours truly,
WM. G. ROBERTS.

Racine, June 21, 1852.

Refined Rosin Oil.

We notice in the Journal of the New York State Agricultural Society, for August, a communication upon the subject of producing oil from rosin. The writer says in substance, that the manufacture of oil from common rosin, was commenced by the Boston Oil Company in 1851.—The oil consists of three kinds, and is adapted to machinery, currying leather, and the preparation of paints. The oil prepared for machinery has been thoroughly tested in the cotton mills at Lowell and pronounced superior to sperm oil alone, for all machinery with heavy bearings; such as looms, shafting, machinery of the heaviest class. For medium machinery, it is used, mixed with equal parts, (half and half,) of land or best sperm oil.—The refined rosin oil, will combine with any other oil, in any proportion, forming a compound which cannot be separated.

The rosin oil has been used in currying leather, for boots and shoes, and for harnesses, with the most satisfactory results. It keeps the leather more soft and much less affected by rain, or by hot or cold weather than the best neats-foot oil.—On the score of economy the rosin oil has the advantage, being some thirty-three and a third per cent. lower, than the prices of other oils, used for the same purposes. If it be a fact, (of which we have no reason to doubt,) that rosin oil will assimilate so thoroughly with linseed or sperm oils and form a compound equally as good, for all purposes—its production is certainly a valuable discovery. A saving of from fifteen to twenty per cent. on oils used by painters and manufacturers, is an item in the economy of their business of no small consideration.

In October, 1791, Mr. Jefferson, then Secretary of State, in preparing a table of the commercial resources of the United States, does not mention cotton among its staples.

A correspondent of the Boston Cultivator says he has a sow which, in the space of sixteen months, became the mother of 58 pigs. Her first litter 10, second 17, third 11, fourth 20.

For the Wisconsin & Iowa Farmer.

Stripping the Ozier.

MR. MARK MILLER:

Dear Sir—I will take the liberty to ask you whether you in any of your researches have not come across some machine or method that will remove the bark faster and cheaper than by hand. It appears to me that there must be some process of manufactory in removing the bark which will entirely do away with the hand pealing. The labor of stripping the bark from the Ozier we find to be expensive and therefore ask your assistance, as above. One reason that I have for thinking that there is a machine for the purpose, is from the fact that the Germans can manufacture so cheap. if not too much trouble, you will confer a favor to let me hear from you on the subject.

Yours in haste,
H. C. BAKER.

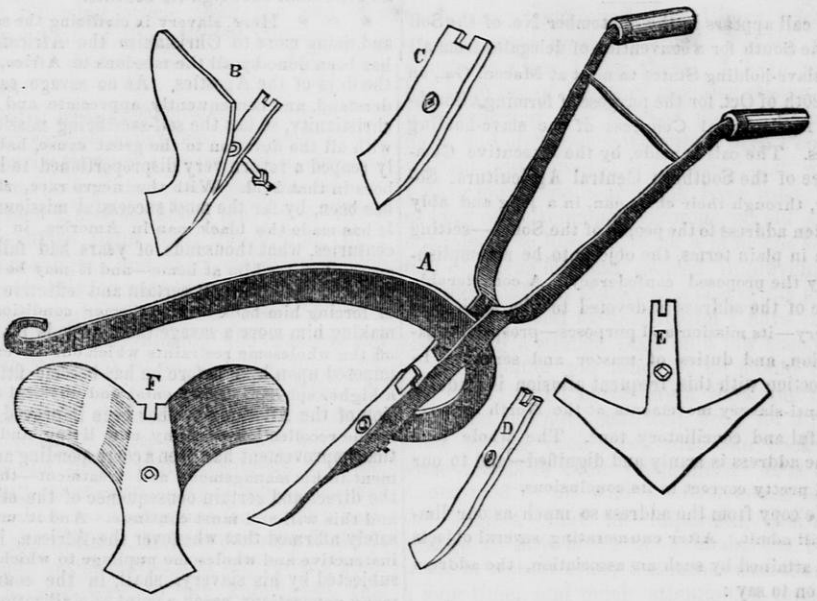
Racine, 1852.

REMARKS.—We have never heard of any machine for the purpose of stripping the bark from the ozier. There is probably nothing of the kind In this country, as the cultivation of the ozier has not yet become of sufficient importance to require such a machine, or to stimulate the inventive ingenuity of some Yankee to produce one. Cannot some our of our German readers, who have brought with them from their father land the art of manufacturirg ozier work, answer the inquiry of our correspondent?

SINGULAR DISEASE.—The following is a translation of an item of news given in the last number of the Turkish newspaper of Constantinople:—"Many persons in Konia and Allasheher, who have eaten lately of eggs and chickens have been attacked with the Littlo Snake disorder. On opening the fowls after they had died or have had their *throats cut*, worms were found in their stomachs resembling snakes; and the newspapers from Persia mention that the same thing has been occurring there."

CURIOUS FACT.—There is a venerable citizen now living in the neighborhood of Cincinnati, who being in his eighty-sixth year, can remember the signing of the Declaration of Independence. He has voted at every Presidential election since the organization of the Government. The Commercial says:

"He descended the Ohio river, and passed the point where Cincinnati now stands, *before a single tree had been felled* upon the spot, and before even a thought of present power had entered into the dreamy phantasies of prophetic speculation. Think of it? One now among us—one among two hundred thousand in the busy uproar of business—one who stood upon the ground where we now live *before Cincinnati was born!* We can scarcely realize it; but it is so. The onward march of impetuous civilization has worked wonders in this great country of ours. The old man can yet see to read without glasses, and is possessed of the vigor of middle life.



Forman's Patent Plow.

The accompanying engraving is a view of a wrought-iron plow invented and patented in February last by James H. Forman of Sharon, Chambers Co., Alabama. The letters refer to different parts of the plow. A is a plow stock with subsoil share attached ; B is the turning share ; C is a medium share ; D is a subsoil share ; E is a sweep or grass killer, and F is the opener. A plow for one horse weighs about from 30 to 35 lbs. ; that for two horses weighs about 40 lbs. With the subsoil share attached, one horse, Mr. Forman informs us, will break stiff clay land eight inches deep ; and by preceding it with the turning share, a depth of twelve inches may be obtained. The medium share with one horse, will break from four to five inches deep on one and a half acres in one day. With the turning share, one good horse will do more ridging and bedding, and do it better, on the land in Alabama, than two horses can do with the Eagle Plow. The sweep can be adjusted so as to run from one to two inches deep, thereby cutting up the roots of grass—killing it—and clearing away weeds around the roots of the growing crop ; it effectually cleans a four foot row by three furrows. The opener, F, opens a very wide and deep furrow, and when the land has been previously broken will do the work of two turning plows. By the adjusting pin, and the extra holes in the beam, the plow can be adjusted to any size of horse, or to dip to any required depth, even to the burying of half the beam. It requires no clevice, has but two bolts and one rivet. It is not subject to wear, as the share effectually shields the foot. This plow is very portable each one can be packed in a space which will not occupy more than a cubic foot and all the parts can be put together, ready for work, in two minutes, and any good smith on a plantation can make it. This plow is well adapted for southern culture, and we have before us the certificates of six planters in Alabama, who are now using it, who say they believe it to be more durable, and better adapted to all required purposes generally, than any other plow with which they are acquainted.

[Scientific American.

INSTINCT OF THE BEE.—In Sydney Smith's sketches of Moral Philosophy, he mentions, on the authority of Dr. Darwin, a curious instance of change of instinct in this insect. 'The bees carried over to Barbadoes, and the Western Isles ceased to lay up any honey after the first year, as they found it not useful to them. They perceived that the weather was so fine and materials for making honey so plentiful, that they quitted their grave, prudent mercantile character, became exceedingly profligate, and debauched, eat up their capital, resolved to work no more, and amused themselves by flying about sugar-houses and stinging the negroes.

Southern Agricultural Congress.

A call appears in the September No. of the Soil of the South for a convention of delegates from all the slave-holding States to meet at Macon, Ga., on the 20th of Oct. for the purpose of forming a Southern Agricultural Congress of the slave-holding states. The call is made, by the Executive Committee of the Southern Central Agricultural Society, through their chairman, in a long and ably written address to the people of the South—setting forth in plain terms, the objects to be accomplished by the proposed confederacy. A considerable share of the address is devoted to the subject of slavery—its mission and purposes—prospective extinction, and duties of master and servant. In connection with this, frequent allusion is made to the anti-slavery movements at the North in a respectful and conciliatory tone. The whole tone of the address is manly and dignified—and to our mind pretty correct in its conclusions.

We copy from the address so much as our limits will admit. After enumerating several objects to be attained by such an association, the address goes on to say :

"To exert an influence in establishing a system of common school instruction which will make Christians as well as scholars of our children—which, in arming the rising generation with the instruments of knowledge, will instruct them also in their proper uses—impressing upon them, from first to last, that (especially under our form of government) private worth constitutes the aggregate of public good—and that no one can disregard his duties to those around him without positive injury to himself.

To cultivate the aptitudes of the negro race for civilization, and consequently Christianity — so that, by the time that slavery shall have fulfilled its beneficent mission in the States, a system may be authorized by the social condition of that race here, to relieve it from its present servitude without sinking it to the condition, moral, mental and physical, into which the free negroes of the Northern States and West Indies have been hopelessly precipitated, by imposing upon them the duties and penalties of civilization before they have cast off the features of their African barbarism.

These constitute the main purposes for which we appeal to the individual and aggregate interests of the slave-holding States to meet us in an Agricultural Congress. In that, let us assemble, and confer and consult, as in a great family reunion—having a common object, and actuated by a common patriotism. * * *

If the institution of slavery is to be maintained —if it is to have with us, as elsewhere, in past times, its old age, and to descend in due course of nature to an honorable grave—the reward of a useful and well-spent life—it must rely on its own power and energy to maintain its rights, establish its security, and vindicate its dignity.

It is not by legislation, nor by statesmanship, that slavery is to be sustained. It can repose in security only on its own merits to those who have inherited it, and will abandon it, as all before them have done, whenever, in the progress of population, its evils shall outweigh its benefits.

* * * Here, slavery is civilizing the savage, and doing more to Christanize the African than has been done by all the missions to Africa, since the days of the Apostles. As no savage can understand, and consequently appreciate and adopt christianity, so has the self-sacrificing missionary, with all the devotion to the great cause, habitually reaped a return very disproportioned to his labors in that field. With the negro race, slavery has been, by far the most successful missionary.—It has made the black man in America, in a few centuries, what thousands of years had failed to accomplish for him at home—and it may be safely declared that the most certain and effective mode of forcing him back to his former condition and making him more a savage than ever, is to throw off the wholesome restraints which our slavery has imposed upon him, before he has become fitted for a higher sphere. The mental and physical condition of the African slave has been improved within the recollection of many now living, and with that improvement has been a corresponding amendment in his management and treatment—the one the direct and certain consequence of the other—and this will and must continue. And it may be safely affirmed that whenever the African, in the instructive and wholesome pupilage to which he is subjected by his slavery, shall, in the course of many generations, reach a point of civilization rendering that pupilage useless to him, he will cease to be a slave, as naturally and certainly as the training of a child merges gradually his minority into manhood, and for a like reason. As all the fruits do not ripen on the tree at the same time, no more will all our negroes become fitted at once for release from slavery. But as they do become qualified, they will be liberated, as many already have been. In many slaveholding communities we see negroes who have become free, because, having acquired the essentials of civilization, by an irresistible law which man cannot, if he would defeat, they are raised from slavery to freedom, without detriment to the master or man. Such has been the operation of slavery generally, throughout christendom; for there has been a time in which slavery existed in each European country, and history scarce reveals when it terminated in any of them—so natural was its death—expiring of old age—dying out by insensible degrees. This is the death to which slavery is doomed in the U. States. This is the only termination which it can reach, consistent either with our own righis or with our duties to the African race transplanted here whose reasonable labor has enriched the land, and whose subjection will have prepared it for civilization, and consequently christianity."

* * * * *

THE WAY THE MEAT GOES.—The Ogdensburgh Daily News says a large drove of cattle bought in Canada for the Boston market, were brought over on Friday and Saturday mornings, and put up in good quarters here *en route* by the cars. They amounted to just sixty, and are good specimens of what Canada can do in her meat as well as flour market. There were also, some good porkers, and in freight and express trains these are not the worst kind of "passengers." The amount of live stock and general provisions that pass by the cars through Ogdensburgh are daily on the increase.

Sheep Husbandry.

The following article from the pen of a correspondent of the *Albany Cultivator*, is well worthy the attentive perusal of our wool growers:

I have had considerable experience in growing wool—having been engaged in the business for thirty-five years, and having had the same flock without changing for twenty-five, which I bred for about ten years, with a view to make them fine; but finding their fleeces too light, and their constitutions too tender for this climate, I determined to increas the weight of fleeces as fast as I could, without materially injuring the quality, and have succeeded so far as to make my flock, consisting of ewes and lanbs, (as I keep no wethers,) shear three and three-fourth pounds, which sold for forty-seven cents a pound, making one dollar and seventy-six a fleece, including commission. My sheep have long staples, thick wool, very free from yolk; have strong constitutions, and are perfectly healthy, not one in two hundred and fifty having been ailing in any way, to my knowledge, this winter, and when I get them up to four pounds per head, with about the quality they now have, I shall have accomplished all I ever expected to.

I have no doubt my flock would have shorn some two ounces more per head by this time, if I had not, some four or five years ago, sold all of two stocks of young ewes, and though I obtained a large price I lost by the operation, as in consequence of that sale I have not been able, till last year, to raise the average weight, over about three and one half pounds. I have no account of more than four sales. Those sales have all been made in the winter. In 1848 it sold for forty cents, and for the three last years for forty-seven; showing that there has been no variation in the price of such wool; and I see by referance to my bills, that the assorting has been very uniform. The prices of low and medium wool have been more fluctuating, and I understand that such wools are now dull, and that the prospect for another year is not flattering.

As my object in writing this is to induce wool-growers to take more pains in breeding and managing their flocks, and as any knowledge I may have acquired, I am free to communicate, I shall briefly state how I have managed to make mine differ from most others.

In the first place, I kept few or no wethers, consequently have raised a large number of lambs in proportion to the number of my flock, and have been able to sell about the number I have raised, and always, (except in the instance mentioned above,) have selected such as were most imperfect; making such selections when I tag them. I have made but little use of bucks of my own raising, but have procured the heaviest fleeced, stoutest built, and strongest constituted ones I could, without much trouble or expense; and when I have found one near right, have used him as long as he remained vigorous, on old ewes not related to him. I think a judicious selection of bucks for and desired improvement, the most difficult matter that falls to the lot of a shepherd; and for that reason I have practised using a strange buck on a few sheep, so as not to suffer too much if he should be a bad cross; and I never buy a buck out of a flock that has not been well bred for a long time, fearing their stock may run back on some defects of their progenitors. It is well understood by all who are conversant with the subject, that no important, desirable change in any breed of animals, has been made in a short time; but rather that it takes a long time, and much attention, to produce a breed that will generally have the particular qualities desired. If, then, we are negligent in this respect, we cannot expect to improve. The principal reason why we have so few good flocks, is, because sheep owners are so frequently changing them. This begining every few years anew, gives no opportunity to become acquainted with the desirable qualities of particular animals. Such exists in all flocks that have any pretensions to excellence; and families, or the descendants of particular sheep, may be traced by a discerning person, in any flock of long standing, thus a little attention to any particular defects, such as course flanks, thin wool, or short or long toes, may be exterpated from a flock by disposing of such as possess them.

I think it very important for every wool-grower to know how his wool assorts, to enable him to know whether he is going astray, or not, in his efforts to improve; and this is one important reason why I approve of the depot system of selling wool; and the more I see of its operation, the more I am convinced that it is for the interest of all who intend to have a good article, and in good order, to have it sold in a systematic way.—Any excitement among speculators, which raises wool above its value to the manufacturer invariably creates a reaction, and a decline on the next clip, which will more than counterbalance the advance on the previous one.

"SUGGESTIONS FOR FARMERS.—If you have any bean straw, do not permit it to be wasted, but feed it to your sheep. These animals are remarkable fond of it, and will partake of it freely when they refuse the best English hay, or even grain. It is sometimes passed though a chaffing machine, and fed to them while suckling their lambs; but I consider this superfluous, as I have never yet known them to refuse it even when they have been too sick to partake of other food.—Mouldy beans may be cleansed, freed from their disagreeable odor, and rendered excellent feed for sheep, simply by pouring hot water over them. If not very strongly tainted, they may possibly be rendered fit for culinary purposes.

Peas that are "buggy" make an excellent feed for swine. The nutritive matter contained in the pea is greater, per pound, than that of any other vegetable, and when ground into meal, or mollified by soaking, it becomes one of the best articles for fattening swine possible to be obtained."

The Peel or Rind of Fruit Indigestible.

"This fact cannot be too strongly impressed upon the public. It applies to all fruit without exception, and includes also the pellicle or skin of kernels and nuts of all kinds.—The edible part of fruit is particularly delicate, and liable to rapid decomposition if exposed to the atmosphere; it is, therefore, a provision of nature to place a strong and impervious coating over it, as a protection against accident, and to prevent insect enemies from destroying the seed within. The skin of all the plum tribe is wonderfully strong compared with its substance, and resists the action of water and many solvents in a remarkable manner. If not thoroughly masticated before taken into the stomach, the rind of plums is rarely, if ever, dissoved by the gastric juce. In some cases, pieces of it adhere to the coats of the stomach, the same as wet paper clings to bodies, causing sickness and other inconvenience. Dried raisins and currants are particularly included in these remarks, showing the best reason for placing the fruit upon the chopping board with the suit in making a pudding of them, for if a dried currant passes into the stomach whole, it is never digested at all. When horses eat oats or beans that have not been through a crushing mill, much of this food is swallowed whole, and in this state, being perfectly indigestible, the husk or pillicle resisting the solvents of the atomach, there is so much lost to nutrition. Birds, being destitute of teeth, are provided with the apparatus for grinding their seed, namly, the gizzard through which the seed passes, and is crushed prior to digestion. The peels of apples and pears should always be cast away. Oranges we need not mention, as this is always done. Orleans, greengages, damsons, and all plums, should be carefully skinned, if eaten raw; and if put into tarts, they should be crushed before cooking. Nuts are as indigestible as we could desire, if the brown skin be not removed or blanched, as almonds are generally treated."

Taste of Turnips in Butter.

About six or seven years ago, I saw it stated in a provincial newspaper, that to feed cows with turnips immediately after being milked, and on no account to give them any a short time before milking prevented the milk or butter from tasting of turnips. The method I pursue is this: immediately after being milked in the morning, they get as many turnips as they can eat. During the day they are fed on hay, and immediately after milking at night, they get the same quantity of turnips. The milk and butter are very much admired by all who take them, both for color and flavor, and I have often been called upon to give a statement of our feeding by visitors. I have several times given the cows turnips a short time before being milked, just to prove the thing. On such occasions the milk and butter tasted strongly of turnips.

[Gardners Chronicle.

POISON OF RUSTED WHEAT.—It is stated that in some portion of the State, people have been made sick, and hogs died of eating the wheat of the season, which has been shrunk by the rust. This is not incredible.—It is, we believe settled that the disease in wheat known as the rust is occasioned by its being attacked, in a certain stage of its growth, by a parasitic plant of the cryptogamous, or fungus species. These plants of which the edible mushroom is one variety and the mosses and moulds are others, are mostly poisonons; and many of them produce a poison of an exceedingly active character. We hope the subject will be investigated before the wheat is allowed to enter into a general consumption.

[Ohio State Journal.

"OIL CAKE.—Experiments prove that *weight for weight*, the cake which is left after the oil is pressed out of the linseed, is more fattening than the linseed itself."

For the Wisconsin & Iowa Farmer,

Large Calves.

FRIEND MILLER—In the July number of the Farmer I noticed an article from the pen of Mr. Brunson, of Prairie du Chien, in relation to the subject of raising calves, in which he speaks of some very large ones raised by a Mr. Cromwell of New York. I dislike boasting upon any subject, and by any person, when it is done for the sole purpose of telling a "big yarn;" but, facts can be spoken of, and the products of different portions of the country can be compared without incurring the censure of those who are fond of facts, rather than fiction; and for others we should not care. About the year 1836, I think, my father, who then resided in Kennebec Co., Maine, raised a calf which weighed 515 pounds when five months old, with no other keeping, worthy of note, but the milk of the mother, and which he sold for $25, when 5½ months old. These facts I know, as I was then but a boy, and drove the cow and calf three miles and a half to a hay scale, for the purpose of having the calf weighed; and when my father afterwards killed the cow for beef, she weighed 919 pounds, including beef, hide, and tallow. This, for a state so far east as Maine, where the people have to pry the sun out of the ice with a handspike or have no sun during the winter, may seem to be a large story; but, it is nevertheless true. Mr. B. also speaks of a yoke of steers which he raised; and, which he thinks were remarkably large, having measured six feet in girth when three years old; and, for which he received the enormous sum of fifty dollars. I well recollect that my father, some fifteen or sixteen years ago, raised a pair of steers, with very little extra keeping, which measured upwards of seven feet in girth in the spring when four years old; and which he sold the succeeding fall for $155, cash, and which weighed, in the Brighton market, 1100 lbs., each. We did not, however, think of calling the attention of the public to a circumstance of that kind in *Maine*, as large calves and large oxen were so plenty there. I knew 4 oxen to be sold by Joseph Underwood, Esq., of Fayette, Me., for $550, one pair of which were twins. Are the *calves* spoken of by Mr. B. considered enormous in the great state of New York, where they raise so many great *men*? Although I will not yield to Mr. Brunson in telling big stories about big calves and steers, I feel myself compelled, *by circumstances beyond my control*, to give the broad side of the track to Mr. Bristol, who has written a communication to the editor of the Lockport (N. Y.) Courier, and which I find in the August No. of the Farmer, in relation to a calf raised by Mr. J. M. Buttery, of Lewiston, N. Y., and which gave milk at the age of two months. That is, indeed, a singular circumstance; and I should be gratified to have the matter explained to the satisfaction of the public, as I believe history does not furnish a parallel.

In relation to the best mode of raising calves, I would here remark, that, as far as I am able to judge, from past experience and observation, calves should never be kept upon better fare at a very early age, than at other periods previous to their arriving at maturity. It is bad policy to reduce *their fare* during the period of their most rapid growth. Calves kept upon a small quantity of food while very young (if not pinched,) and that food plain and wholesome, will bear high keeping at a more advanced age much better than calves, which have been pampered while young can stand poor keeping.

If a farmer wishes to raise good stock, and is able and willing to give his cattle good keeping, I know of no better way for him to do, than to give his calves all the *milk and corn meal* they can eat, until 5 or 6 months of age. They will seldom be injured by over-eating; and, in in that way he will lay the foundation upon which he can build a noble superstructure.

There is, however, a great difference in the form of calves, which should be observed by every stock-raiser. None should be raised for profit, excepting the most promising, which, by the by, is not always confined to the largest. Large animals are sometimes the least profit, for the dairy, stall or farm. No man should think of turning his attention to stock raising, unless he is a tolerable judge of stock; for the more poor stock raisers we have among us, the worse is our condition. Too little attention is paid, by our farmers generally, to the subject of stock-raising. They are too apt to estimate their cattle by *number*, instead of quality, and that is the great reason why our country is flooded with scurvy stock. Farmers keep cattle, they say, *to eat up their foddder*, without reflecting that half of their stock, well kept, would be less trouble, and more profit, than all, poorly kept. I hope this subject will be taken into consideration by the farmers of our state particularly, and, that, the error of keeping *many poor cattle* will be corrected.

Yours truly,

SOLOMON LOMBARD.

Green Bush, Wis., Aug. 4th, 1852.

CROPS AND PRICES.—A correspondent of the Fond du Lac Journal, writing from Rochester, N. Y., says:

The crops of New York, Maryland, and Deleware are of a medium yield only, the hay crops, in particular are very poor, and cattle throughout the whole state, will, this fall be sold remarkably cheap. What they call *cheap* for cattle here, with us would be very dear; $20 and $30 for cows, and that too of a very inferior character. I saw Cows and Calves sold in Virginia for $40 that, in Northern Wisconsin, would not bring more than $15 and were really not *worth more* than this latter sum; but land, old worn out farms, may be bought in Virginia for 1,50 and 2,00 per acre, that in the hands of a Yankee farmer, would, in three years be worth 25,00 per acre; all these lands want, is Yankee go-a-head-a-tiveness.

I was surprised to-day while spending an hour or two among the numerous flouring mills here, to see farmers here getting 80 cts. and 1,00 per bushel for wheat, not a particle better quality than our farmers raise, for which they get but 45c and 50c per bushel—what makes this *great* difference?

PEA VINES FOR MILCH COWS.—Mr. J. Q. Hewlett, of this city, informs us that he took his cows off of an excellent clover field, and put them to feed on the vines of the black pea, the result of which was, that the first week the product of the butter was increased from 16 to 21 lbs. and the second week a still further improvement from 21 to 24 lbs. [Exchange.

Mules and Horses.

A writer in the Southern Cultivator makes the following estimate of the comparative expenses of horse and mule teams. If the conclusions here figured out by the writer are correct, farmers should turn their attention to the subject and substitute the mule for the horse. Would not still greater economy be found in the employment of the ox instead of the mule, as a working animal for farm purposes generally?

"I propose now, Mr. Editor, to give you a calculation in figures of the saving to the farmer by the use of mules instead of horses; and, for that purpose, I will take a team of ten for a period of twenty years; will suppose the horses and mules to cost at their purchase the same price, and will estimate the difference, saved in the feeding of the mule, of Indian corn, at six barrels each per annum, or that the horse will consume twelve and the mule six barrels each per annum, to keep them each in good working order.

Upon that data I make this exhibit:

10 horses will consume each 12 bbls, corn per annum, say for 20 years, which is equal to 2400 bbls., worth on an average, $2,50 per barrel,	$6000
Shoeing 10 horses will cost $30 per annum, ($3 each, or more, which we have to pay,) say for 20 years,	600
Cost of feeding on corn and shoeing 10 horses for 20 years,	$6600
10 mules will consume each 6 bbls. corn per annum, say for 20 years, which is equal to 1200 bbls., worth, on an average, $2,50 per barrel—*no expense of shoeing*,	$3000
Amount saved in 20 years by mules,	$3600

According to this estimate, we have the surprising sum of $3600 in twenty years, or about $200 per annum, gained or saved by having mules instead of horses; but large as this sum is, it can be fairly augmented to upwards of $4000, by taking into the calculation the greater longevity and exemption from diseases of the mule, which items are not set down in the above statement. At the end of the twenty years, how will the matter stand? In all probability, the horses will all, or nearly all, be dead, while the mules, we may reasonably suppose, unless very badly treated, will all, or nearly all, be living, and be good for service for some five or ten years longer."

Foundation of the French Merino.

[Translated from the French]

My father, born of a family of cultivators, busied himself in his youth in raising Sheep. In 1786, the Queen of Spain made a present to the King of France of a flock of ewes and bucks, selected from the very best merino blood in the country. Half of this flock was sent to Rambouillet, where it still exists. The other half was ceeded by the King to a proprietor, M. de Chenorier, who placed them on his farm at Croissy, about four leagues from Paris. At this date my father was twenty-seven years of age. As soon as he heard of the arrival of the flock, he went to see them, and renewed his visit yearly, to assure himself if our climate would agree with this new breed and to learn their produce of wool and flesh, as compared with the native breeds, when he became convinced that the climate agreed with this new race, and that they offered a great advantage from the quality of wool obtained, as well as for their flesh, compared with the then existing breeds in France. He purchased at the first sale of the produce of these sheep, which took place at Croissy in 1800, one ram and eight ewes. The ram was four years old, and weighed 125 punds, and carried 12 pounds of wool, and the ewes averaged 9 pounds in its pure, unwashed state. He continued to buy yearly from two to four sheep until 1810. In 1811, he bought 50 ewes and 5 ram lambs. In 1818, he bought 54 ewes. At this date the whole flock was sold at Croissy, at an average of from 120 to 300 francs each.

The pasturage at Croissy was much better than that at Rambouillet, and the flock superior. This is why my father made his acquisitions here in preference to those at Rambouillet. In 1821, he bought a buck at Rambouillet. Notwithstanding these two flocks were of the same family, he obtained a great advantage by an alliance of blood, of the flock of Rambouillet with his, being of the same lineal descent, but a complete separation having taken place since 1786, between the two flocks. From 1821 to 1829, he bought five bucks at Rambouillet. At this epoch, my father ceded to me his entire flock of merinos, which numbered 209 ewes from three to six years old; 176 ewes from one to two years; and 90 yearling bucks. In 1832, I bought the 55 ewes submitted at the public sale at Rambouillet. Since then, I have bought several ewes and rams to maintain the renewal of blood of my flock, at times necessary. In choosing reproductors in animals, the best conformed, bearing the greatest quantity of

the best quality of wool was my guide, and by this constant care and study I have realized from my best rams twenty-four pounds, (27 pounds English) and from my ewes eigteen pounds, (20 pounds English) of fleece wool.

The good direction given by my father to his flock acquired him the greatest reputation throughout France. No person from the States visited our flock previous to the 11th of May, 1846. Then we had the pleasure of a visit from Mr. John A. Taintor of Hartford, to whom I sold two rams and seven ewes.—Since then I have continued each year to effect shipments of rams and a few ewes to Mr. Taintor, who succeeded in making this breed prosper in America, as it has in France. I have also had the satisfaction of a visit from Mr. Isaac de Forrest of New York, Mr. Sanford of Orwell, Vermont, and Mr. S. W. Jewett, of Middlebury, Vermont. To the latter, I sold, in 1851, 82 ewes and 18 bucks. In 1852, I sold him 94 ewes, and to deliver in 1853, I have sold him 90 ewes. I also received a visit from Mr. Parker and Mr. Howard of Shampaign, Ohio, to whom I could not sell any ewes this year or next, to their great regret.

From the various essays made by my father to improve the merino breed, and those which I have continued to effect on the same principles, we have arrived at the conclusion, that in order to improve the breed, we must not allow our ewes to yean lambs till three years old, and to use no bucks until they had arrived at full maturity. It was necessary to feed them upon sound land; dry in preference to damp pasturage; and to renew the blood of the flock every five or six years. If you are longer in renewing it, one can maintain the same quality in his flock, but cannot ameliorate it. We separate the ewes into as many lots as we have bucks, taking particular caution not to use a ram of any defect to ewes of the same defect. By these means thoroughly executed, we arrived at the improvement of the race.

We did not decide upon exhibiting our flocks for the prize until 1844, when the Agricultural Assembly at Paris appointed a commissioner to visit the best flocks in our country. As soon as the commissioners made their report, the Minister of Agriculture granted me the great gold medal. In 1845, the Agricultural Assembly met at Gregnon. I sent there 350 ewes and 4 bucks for exhibition. The first prize was accorded me and my father, who was then 86 years old, and received it from the hands of the Duke of Nemours, conducted by my two sons. To the general concourse, which took place at Versailles in 1851, I and my colleague, Monsieur Cugnot, sent each of us three rams, and the first premium was granted us.

VICTOR GILBERT.

Widerille, Commune de Crespieres Seine et Oise, le 7 April, 1852.

HARVESTING BUCKWHEAT.—Buckwheat requires more care in harvesting, in order to prevent loss from the shaking off the seeds than any other crop. Some writers recommend cutting it as soon as one-third of the seed are turned brown; others say two-thirds. If we wait for all to ripen, the earliest and best portion of the grain will be lost. When perhaps one-half of the seeds are turned brown, the grain should be cut; and as the straw is very succulent and juicy, the unripened grain will draw norishment from the stock, and will fill out and ripen very well after it is cut. Some prefer to cut this grain when it is wet with dew. The most approved method of harvesting is to cradle the buckwheat, and then with a rake put it into bunches about the size of ordinary wheat sheaves, and set them up without binding.—By raking or rolling it together with a rake, it is interwoven in such a manner that it will stand any desirable length of time, and when sufficiently dry it may be taken up with a fork and placed on the wagon without the loss of a grain. It should be threshed out immediately. It is very easily threshed, when it is in good condition. It will often be necessary to let it remain in the bunches ten or twelve days before it becomes sufficiently dried and cured. It rarely suffers any injury from exposure to rains.

[Maine Farmer.

HARVESTING TURNIPS.—Pulling turnips and cutting off the tops by hand and knife, which is almost the universal practice among American farmers, is about as far behind the age of improved husbandry as digging up the land with a hoe, instead of plowing. In England, turnips are almost invariably planted in drills; at pulling times the laborer passes along the row with a sharp light hoe, with which he dexterously cuts off the tops, throwing them by the same motion into the hollow between two rows. Another person follows with another hoe which he strikes below the bulb so as to cut off the root, throwing the turnips of the two rows together ready for the gatherer to basket and carry to the pile or cart for storage. Sometimes one hand performs both operations of topping and digging, but two work to the best advantage. [Scientific American.

HORTICULTURE.

Brief Horticultural Notes—No. 10.

BY JOHN A. KENNICOTT, M. D.

THE FLOWER GARDEN.

Let us leave the Orchard for a moment and say something about flowers. All nature is full of the beautiful, and the meaning of this is very evident, though not always understood. The Creator has been very good to us, and you may rest assured that flowers were designed to influence man, as well as continue the species to which they belong.

There is more good sense and practical utility, in the cultivation of beautiful flowers, than most people imagine—Whatever refines and simplifies the taste, and enlarges the sphere of innocent and rational enjoyment, is always useful, in social and intellectual life, though it may not be neceseary, to mere animal existence.

The love of flowers is, in an eminent degree, salutary and humanizing ; and the little time and expense, required for their cultivation, yield a greater profit, in pure pleasure and mental refinement, than any other home luxury.

Cultivate flowers, and learn to love them, my farmer friends, if you would add to the pleasures and increase the sweet influences of home. The greatest and the best have loved flowers, and cultivated them with their own hands ; and every right-minded and observing man has borne witness to the delights of the practice, and its good influence on others. It has often been said, and can not too often be repeated, that the child, taught to love flowers and tend them at home, is more apt to love and respect all home pleasures and duties, than the one whose eyes have never been opened to the beauties of nature, or whose young hands have never planted, watered, or weeded a single shrub or flower.

There is no luxury so cheap as green leaves, and sparkling, or deliciously scented flowers. There is no external ornament so indispensible to the respectable farm-house, suburban-cottage, or lordly mansion—and there is no other mere embellishment of a home—so universally admired, so entirely appropriate, and perfectly democratic, and so completely within the means of the poorest laborer, who owns a rood of God's own beautiful earth, and has the will to improve it.

By the tasteful and careful display of a few native trees, vines, and flowering shrubs and plants—or by the purchase of five dollars' worth of them, and foreign varieties—the log-cabin, or the rough board shanty can be made more worthy of note, than the most costly city edifice, with staring brick walls, and not a green tree, or a gay flower to soften its hard dry, money-begotten aspect, or relieve its cold and uninviting entrance. But my sermon is somewhat too long—Let us proceed—

I enter upon this subject now, because autumn is the *only time* for planting some very desirable flowers, and the best time for others. Nearly all the hardy BULBS *must* be planted late in summer, or during autumn, and October is the best month for this work. Many TUBERS are more certain to do well, if planted in autumn also ; still these may be left until spring.

BULBS and TUBERS are sometimes confounded, but a familiar example will show the difference. The onion is a "Bulb"—the potato a "Tuber,"

For most bulbs, to be planted out in October, the soil should be enriched with well rotted manure, leaf mould, &c., and the whole well mixed, deeply spaded, and finely pulverized, a few weeks before planting ; so that the soil may have time to settle and pack together—a heavy soil, containing a good portion of clay, is the best for most Bulbs, if made rich enough, and dug two feet deep, and well drained.

Bulbs of large size should be planted from 3 to 4 inches deep—small ones, from 1½ to 3 inches—reckoning depth from the top of the bulb when planted. They must always be so deep as not to be easily uncovered by rains, &c., and as an aid in this, and to prevent injury to the fibrous roots, by the lifting power of frost, it is a good thing to tread or pack the bed hard, after planting.

Rows, one foot apart, and nine inches in the row, is a good medium distance for single bulbs, of most kinds, intended to be taken up every summer—Large ones, like Crown Imperials and Tiger Lillies, require more space, and so do all, if you design to leave them several years in the same bed, without dividing and replanting.

Bulbs may be had of the seedsmen, or nurserymen. We have a very good supply, at The Grove Nursery, and my excellent friend James Dougall—Detroit Mich.—is especially well supplied with Tulips and Hyacynths.

The price, under name, ranges from 25 cents to $2, per doz.—seldom over 25 cents per root—and good "mixed varieties," as low as $1, per dozen, for such as once cost a dollar or more apiece. And this is the best way to purchase them.

We have mixed nearly all of our *varieties* retaining the species only, under name; and now sell accordingly.

As many persons do not know the names of bulbous plants, in cultivation, I will name most of the more common hardy sorts, found in most good gardens, and costing but a mere trifle, compared with the ancient prices for similar plants.

The Crocus. This is a very pretty little bulb—quite hardy, and easy of cultivation, and most of the varieties are among the first flowers of spring. Indeed, I have seen a south border gay with them, and an old snow bank, slowly melting away, on the north side of the same bed. The colors of the crocus are much varied, and often beautifully mixed. The plain colors are white, blue, purple, bright golden yellow, &c. The crocus is a great bloomer, and will stand the hardest frost when in full flower. There is an autumnal variety, that comes into bloom about the commencement of cold weather in the fall, when there is little else in flower.

The beautiful little blue Siberian Squill flowers early (March and April,) but is not common.

The Tulip is the most gorgeous and most renowned of bulbous rooted plants. A small fortune has, in times past, been paid for a single flower; and an immense capital sunk in a single collection, during the rage of "The Tulip mania," in Holland—Five to five hundred dollars per root was freely paid; and now, about as good plants may be had at 25 cents each, under named, or half that sum, unnamed or "mixed," when by the quantity.

The colors of the Tulip are infinite—and the "feathering" and blending delicate and chaste beyond the power of imitation.

The Duc Van Thall flowers early in April during the continuance of severe frosts; but the sweet month of May, is the proper tulip season, in this region.

Unlike other flowers, double tulips are less prized than single ones; and those most showy are often of the least value. It is a good thing to tie up the tall stems of the largest flowers, and if you can afford to cover your bed with an awning, the flowers will last much longer, and retain their freshness and brilliancy to the last. Eight dollars will purchase a bed of mixed tulips, which will make a more magnificent show, (with its hundred goblet-shaped flower cups, of every hue, on stems two or three feet high, and this repeated and increased yearly) than ten times that sum expended in many less sensible ways. Few people ever see really fine tulips, however, in ordinary cultivation, and poor ones are scarce worth having.

The Hyacynth. Here, now, is a plant that should you happen to get a variety, not quite so beautiful, in form and color, will be sure to give satisfaction, if you enjoy the most exquisite perfumes. And then a fine Hyacynth is very beautiful, withal; and though not quite so varied in colors, they are rich and elegant. The double varieties are most sought for, but some single ones are valuable. This plant blooms pretty well in a deep glass of pure rain water, in the winter parlor—but the bulb is often ruined by this mode of flowering—Potting is safer, where bulbs are scarce. Good Hyacynths cost 25 cents apiece, and often much more.

The little grape Hyacynth is cheap and multiplies rapidly.

The Narcissus family contains many desirable early blooming plants. Some of them extremely fragrant.

The Polyanthus, Daffodil, Jonquil, Poet's Narcissus, &c., belong to this tribe—Some of them increase with rapidity, and all are more or less desirable. They are mostly cheap.

The Gladiolus. Some species, and those the most beautiful, of this very showy genus, are tender, and must be kept from frost, and planted out in May. But the numerous varieties of the Gladiolus communis are hardy, and should be set in Autumn.

The Bulbus Iris has many rare and perfectly unique varieties, but, except the "English" sorts, we have found them rather difficult of cultivation. The Spanish Iris, especially so.

Crown Imperials are coarse plants, and some of them with a strong and disagreeable perfume, yet they are extremely hardy, and quite showy, during the hardest frosts of spring, and are desirable, in clumps, in the least frequented parts of the garden or lawn.

The Tiger Lilly, Orange Lilly, our splendid Native Lillies, and many others, which I have no time to mention, in this already extended article, are all showy and desirable plants—costing a mere trifle.

The White Lilly has not done very well with us; it is an equisitely fragrant, and very desirable flower, nevertheless.

Now, I presume, that any man who wishes to try them can obtain a hundred bulbs, embracing all these Genera, and most of the *species*, and possibly 25 to 50 *varieties*—the varieties unnamed—for from $8, to $15, or *all named*, for $20, to $25—and all the best of their kinds.

The Grove, Ill., Sept. 3.

Number 11.

FALL PLANTING OF FRUIT TREES.

In a previous number I advised to plant orchards in the spring only—and this is always the *safest* time, but seldom the most convenient.

In autumn the farmer has the most leisure for the work, and if the nursery is distant, he can very probably haul home his trees at half, or even one third of the expense of labor or money, required, during the deep mud of the early spring. And then again, he can prepare his land and plant his trees in a much better manner in autumn, as the soil is in better condition to work—and what is often an object with the planter, he can get his choice of trees, in the nursery, in the fall, before the best, in his estimation, have been selected by, or for other purchasers.

Nurserymen always prefer selling in autumn. They have time then—all of their planting, and much of their grafting, being on hand in March and April—and they also get their money four months earlier, and there are few nurserymen who can not afford to give better bargains in October and November, on that account, and the other, as well as the risk, that he as well as the purchaser runs in wintering trees in our changeable and severe climate.

The serious objections to fall planting, are, the heaving of the soil in winter, and the diminished vitality of recently removed trees. Even when carefnlly taken up, trees loose a great portion of their roots, and recieve a shock that, in a great measure disables them from enduring the alternations of frosts and thaws, and cold drying winds, so common during winter, and the fore part March—and even though the roots of the trees should not be thrown out, by the freezing and thawing, they are more or less loosened, and drawn out, and the chances for the tree to do well, rendered less promising.

There *is* a way, however, or a protection after fall planting, by which all the risk of throwing out may be prevented, and the danger from the vital shock materially lessened—It is this—after planting your trees in the ordinary way, take a plow with a stout horse, or two "ad tandem"—one before the other—and throw furrows both ways, up to the newly planted rows; and then with shovel and hoe, go over all, and make a regular mound of earth, from one to two feet high, around the stem of each tree, according to the size of the tree, and the liability of your soil to heave by frost—As soon as the ground is well settled in the spring, you can level down these mounds, with very little labor; and the making of them is not so expensive as one might

think—a man, with shovel alone, will make fifty, or level down one hundred, in a day.

We do not practice fall planting, nor advise it here—But where the soil is reasonably dry and sandy, it is often practiced with entire success, without protecting the trees—though not in our black prairie muck—

Men often ask, "why not protect the trees with a mound of manure?" I will tell you why—The manure might ferment and kill the stem of the tree; but this is not all—a manure pile makes a comfortable harbor for a colony of MICE, and I have always found these vermin worse than RABITS or BORER, or any of the enemies of the orchard—"Blight" excepted. My Brother—Dr. Wm. H. Kennicott, of Chicago—has a farm adjoining mine, usually rented—and his tenants last winter, caused the irreparable injury, or *death*, of 150 noble bearing apple trees—a few of them 20 years old and all good sorts and fine bearers—by doing this very thing. They hauled on their manure and waste straw during winter, to save time in spring, and placed it in piles around the trees; and every pile had its family of mice, and every tree thus treated was partially or entirely girdled; and often for one foot, up and down—I consider his loss equal to $1,500, and instead of "damages" he was glad in the end, to "get shut" of his tenants by paying *them* $150 to flit.

If you wish to procure your trees in autumn, and not plant until spring, you must seek a dry place, where there is plenty of sand in the soil, and after making it deep and mellow, and seeing well to the drainage—dig a trench about two feet, or more, in depth, at an acute angle with the surface, and bury the roots, and half the bodies of your trees, therein. Be careful, however, not to permit either roots or tops to touch each other, too compactly—and see that very fine mellow soil comes in contact with every root.

And now, attend well to the drainage, and guard against mice, and rabits, and your trees will come out, when ready to plant, in April, as fresh and sound as the moment you "heeled them in"—

The Grove, Northfield, Ill.,
September, 10th,

Flavoring Principle of Fruit.

The advances of Chemistry, as applied to agriculture, are so rapid that we are scarcely able to record them. The cause of flavors in fruits, and ingredients of which these flavors are composed, are now being rapidly ascertained. An article, called by the Germans *Fusel Oil*, has been separated from grain, potatoes, and indeed from all vegetable substances usually fermented for making alcohol or wines. This *Fusel Oil*, or its constituents, seems to pervade all vegetable nature in minute quantities; when separated it has of itself but little flavor, but upon the addition of any one of the acids it immediately throws forth the aroma, and has the taste of some of the fruits. Thus with ascetic acid we have the flavor of the Bananna; with hydro-chloric acid, the cherry; with nitric acid, of the Pine Apple; and by changing the acids we may produce in turn each of the known fruits; and many of the new organic acids more recently discovered give us delicious flavors, which may be found hereafter to belong to some new vegetable product. This mere admixture of Fusel Oil with most of the acids, forms poison, but when properly *etherized* is innoxious if used in small quantities, and a single drop will flavor many pounds of sugar, and sometimes a gallon of fluid. Who knows then but we may soon discover the means of adding, in the form of manures, such materials as by the chemical action of the tree will improve or augment the flavor of the fruit. Dr. Charles Enderlin, at present in New York, now has the subject under investigation.—He is one of the ablest of our organic chemists, and was for a long time associated with Liebeg, to whom farmers are so deeply indebted for many of the improvements of the last few years. The subject is so vast, and the results in anticipation so beautiful, that it almost tempts us to rush back from the field to the laboratory, and were we younger in our art, we should certainly do so. Apart from the direct advantages to arise from these investigations, it promises to open a new field in the examination of the organic proximates of plants. The general term, organic matter, found in the analysis of soils, may require for certain success in the hands of the practical operator, various sub-divisions, and we shall wait with nervous anxiety the results of the experiments of Dr. Enderlin. We have seen many of the new flavors he has produced, and they almost tempted us to believe that we were amid groves of unknown fruits.

[Working Farmer.

Insects and Pear Blight.

Prof. Turner, of Illinois. thinks he has discovered the cause of the western pear and apple blight. He finds little white specks on all parts of the tree—as every one has observed—but some of these are larger than the rest, appearing like a "mite of mould" on the bark. This he finds, by the use of the microscope, to contain "infinitessimal" eggs in vast numbers, which subsequently hatch into microscopic insects. They appear to exude a poison, which destroys the bark beneath, leaving small holes like the prick of an awl, and are in short the cause of blight, that is, in other words, death. As many close observers, with powerful microscopes, have never discovered these punctures in diseased trees, we may fairly infer, that if these insects cause the death of Prof. Turner's trees, they do not of most other peoples. He has tried ineffectully to destroy them with "soap, ley, ashes, lime, copperas, sulphur, plaster, tobacco, spirits turpentine, salt, coal-tar, charcoal, asafœtida, and a whole apothecary shop of other drugs." He calls for the observations and experiments of others. He proposes for this insect the elegant name of "pear devil." [Albany Cul.

Salt for Quince Trees.—In the fall of 1850 I sprinkled about two quarts of coarse salt around an old quince-bush that occupied the middle in a row of three trees. When I gathered the fruit, and found that on the *salted* tree decidedly superior, both in beauty and in size.

A few words in regard to the time of applying salt to fruit trees. If the application be made in summer, while the trees are growing, the danger is, that unless the quantity be small, the growth of the tree will be checked, and it will lose its foliage; that a new growth will commence the same season, and if this be not in time to mature before the appearance of frost, the growth will again be checked unseasonably, and the tree will die. It should therefore be applied either in the fall or early in the spring. [Cor.N.Yorker.

Harvesting Beans.

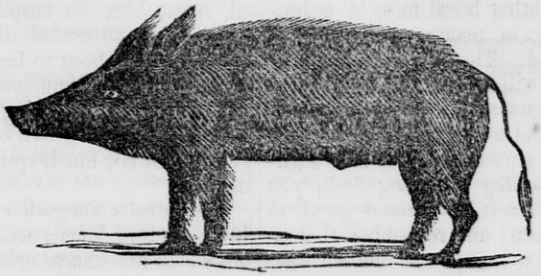
We have heretofore given what we consider the best method of harvesting and securing beans. It is attended with but little trouble, and it has never failed with us to secure them in the best order, even if the weather, a part of the time while they are out, is quite unfavorable. Beans, in this State, are generally raised with corn; and they require to be pulled and secured before the corn is harvested.

We first procure the requisite number of stakes, which should be about six feet in length, and of convenient size. These are to be used in pairs, and they may be left in the field at suitable distances apart for a stack. With a crow-bar make two holes in the ground, about eight inches or a foot apart, and sufficiently deep to hold the stakes firmly. It is better to have the holes made parallel with the rows of fence, for convenience in removing the stakes. Into these holes insert a pair of stakes, and on them, about eight inches from the ground, wreathe a withe, to keep the beans from the ground. In pulling the beans, the roots are to be kept together; and in arranging them between the stakes, first place a small handful on the withe, then another handful on the opposite side, tapping them a little, and turning the roots towards the centre of the stack, while the branches and leaves are on the outside. Proceed in this manner, keeping the stack nearly cylindrical in form, until it is built up high enough; lay a small handful on the top, over the roots, for a cap; then press the stakes together, so as to keep the beans in place, and confine them by a withe from stake, to stake, at the top. Stacks put up in this way, will shed rain completely, and resist the action of ordinary winds, for any desirable length of time.

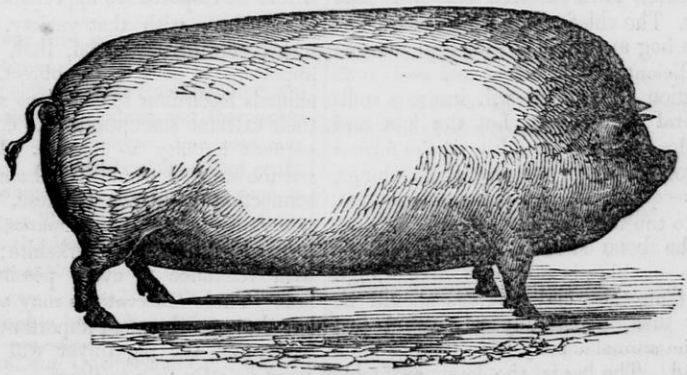
There is another matter of considerable importance, which we notice is not understood by some farmers. They omit to put on the withe at the bottom, and when the beans are removed, they have to be separated, thus making more labor, besides shelling out a portion of the crop. The better way is to have a good withe at the bottom; and when the beans are to be housed, let one hand steady the top of the stick, and another place a handspike under it, between the stakes, and thus lift the whole up together, and remove them to the cart and the barn in the same form as they stood in the field. In this way they may be removed with but little labor, and without losing a bean.

[Maine Farmer.

Discovery of a New Fibrous Plant.—Our esteemed friend, Col. Maunsel White, of New Orleans, informs the editor of the Delta, that the okra plant, which grows freely throughout the south, is one of the best fibrous plants known. It is coated with ten layers, which are very easily separated from the wood by crushing between iron rollers like a sugar mill; and that the hemp is almost indestructible in water. They may prove a valuable substitute for hemp, as it can be grown where that cannot, and at much less expense for culture and preparation. There are many things yet to be learned before we shall all become *book farmers*. [Am. Agriculturist.



Prairie Shark.



Improved Middlesex Hog.

The above portrait of a Middlesex hog we copy from the New England Cultivator, and which represents a half-blood (a cross of the Suffolk and Middlesex breeds.) The Suffolk and Middlesex hogs are now esteemed the most valuable in New England. They are much alike, but do better by crossing—are distinguished for their early maturity, small consumption of food and inclination to fatness. It is not uncommon for Suffolk pigs at eight months old to weigh 350 lbs.. A correspondent says: the likeness is truthful, and the hog from which it was drawn, whighed at six months old 462 lbs., and doubts whether better stock can be found. Most farmers are not content unless they have a *large* hog, at killing time, without much regard to fineness of form, goodnes of flesh and pork, or beauty in appearance. Our hog-raisers are too apt to exclaim and insist—"give me the hog at 12 months old, that'll put down the balance to four hundred and upwards, and I don't care about smali bone, short nose, fine ears, thin skin, and all that."

This fine apecimen of what a hog may be, presents a sorry contrast, when compared with the Prairie Shark so common in the west—a life-like likeness of which (no gesting) stands at the head of this article. They will eat their weight in corn every twenty-four hours and squeal for more one half the time. They are fast passing away however and giving place to a more comely race. A decided improvement has been made in the quality of hogs in the range of our acquaintance, within the last three years; and though we find no distinct breeds, many very fine hogs are raised among us. There is room for further improvement which can be done in no better way than to import from the east, among us, some of the improved Middlesex boars. It is true, the outlay would be considerable, more perhaps, than many of our farmers would feel able to bear individually; but a neighborhood of twenty or thirty farmers, might associate together for such a purpose and thus render the expense comparatively light; and yet all reap the advantages to be obtained. Now, who of *our* neighbors will join us in such an enterprise. We are in correspondence with some friends at the east as to the relative merits of the Suffolks, Berkshires, Middlesexes and their crosses for market pork. To get a breed of hogs such as the Suffolk or Middlesex, is certainly a desideratum.

Points of a good Hog.

I could caution the reader against being led away by a mere name, in his selection of

a hog. A hog may be called a Berkshire or a Suffolk, or any other breed most in estimation, and yet may, in reality possess none of this valuable blood. The only sure mode by which the buyer will be able to avoid imposition is, to make name always secondary to points. If you find a hog possessed of such points of form as are calculated to insure early maturity, and facility of taking flesh, you need care little what it has seemed good to the seller to call him; and remember that no name can bestow value upon an animal deficient in the qualities to which I have alluded. The true Berkshire—that possesses a dash of the Chinese and Neapolitan varieties—comes, pehaps, nearer to the desired standard than any other. The chief points which characterize such a hog are the following: In the first place, sufficient depth of carcass, and such an elongation of body as will insure a sufficient lateral expansion. Let the loin and chest be broad. The breadth of the former denotes good room for the play of the lungs, and a consequent free and healthy circulation, essential to the thriving or fatteing of any animal. The bone should be small and the joints fine—nothing is more indicative of high breeding than, this; and the legs should be no longer than, when fully fat, would just prevent the animal's belly from trailing upon the ground. The leg is the least profitable portion of the hog, and we require no more of it than is absolutely necessary for the rest. See that the feet be firm and sound; that the toes lie well together, and press straightly upon the ground; as also, that the claws are even, upright, and healthy. Many say that the form of the head is of little or no consequence, and that a good hog may have an ugly head; but I regard the head of all animals as one of the very principal points in which pure or impure breeding will be the most obviously indicated. A high bred animal will invariably be found to arrive more speedily at maturity, to take flesh earlier, and with greater facility, and altogether, to turn out more profitable, than one of questionable or impure stock; and such being the case, I consider that the head of the hog is, by no means, a point to be overlooked by the purchaser. The description of head most likely to promise, or rather to be concomitant of high breeding, is one not carrying heavy bone, not to flat on the forehead or possessing a too elongated snout—the snout should be short, and the forehead rather convex, curving upward; and the ear should be, while pendulous, inclining somewhat forward, and at the same time, light and thin. Nor should the buyer pass over even the carriage of a pig. If this be dull, heavy, and dejected, reject him, on suspicion of ill-health, if not of some concealed disorder actually existing, or just about to break forth; and there can not be a more unfavorable symptom than a hung-down, slouching head. Of course, a fat hog for slaughter, or a sow heavy with young, has not much sprightliness of deportment.

Nor is color altogether to be lost sight of. In the case of hogs I would prefer those colors which ars characteristic of our most esteemed breeds. If the hair be scant, I would look for black, as denoting connection with the Neapolitan; but if too bare of hair, I would be disposed to apprehend too immediate alliance with that variety, and a consequent want of hardihood, that, however unimportant, if pork be the object, renders such animals hazardous speculations as stores, from their extreme susceptibility to cold, and consequent liability to disease. If white, and not too small, I would like them as exhibiting connection with the Chinese. If light or sandy, or red with black marks, I would recognize our favorite Berkshire; and so on, with referance to every possible variety of hue. These observations may appear trivial; but they are the most important I have yet made, and the pig buyer will find his account in attending to them.

[Rural Hand Book.

Clayton County, Iowa.

The Crawford County Courier pays a flattering and well merited compliment to the farmers of *Clayton County Iowa*, in an Editorial article, from which we copy the following items:

"The farmers of Clayton seem to conduct their business in a more scientific manner than is usual in the West. We have often heard the remark, that if the farmers on the Western prairies would pursue as judicious a system as the New Englanders, work as hard, and be as economical, they would get rich in five or six years. Those of that region indicate such a spirit, and they *are* getting rich.

The agricultural resources of this county are equalled by few and surpassed by none in the West. Only about six years ego, this was comparatively new; now, farms join each other, and the high state of cultivation to which they are brought reminds one of the fields of New England, or compare favorably with the rich old farms of Pennsylvania.—We have never seen in any country, or in any season, such a broad extent of fields where every crop looked so promising."

Rape Seed.

RACINE, Aug. 30, 1852.

M. MILLER, ESQ:

Dear Sir—Are you in any way acquainted with the raising of rape seed, and whether the seed is sown in autumn or spring, whether a wet or dry locality is best for it? It is raised very extensively in Germany for the sake of the oil obtained by pressure from the seed. I think it might be a valuable product here on our fertile prairies if we could get the proper mode of culture, and amongst your very many able correspondents surely some few might be able to inform us on the subject.

Yours very truly,
A SUBSCRIBER.

REMARKS.—Rape seed may be sown either in spring or in early autumn. The land best suited to it, is a strong rich soil, free from standing water. The land should be clean and thoroughly worked before the seed is sown. The seed may be sown broadcast, or in drills about a foot apart. When sown broadcast, care must be taken not to sow it too thickly. The seed of the rape ripens very unequally—the lower pods being ready to burst before those at the top are full. It should be cut when the dew is on and handled carefully, or much of the seed is lost in harvesting.

CARLISLE, Cumberland Co. Pa., September 13, 1852.

MR. EDITOR—Please excuse the liberty I take in writing to you. As I am not acquainted with any one in the State of Wisconsin, I take the liberty to write to you for information:

1st. I wish to know the subscription price of your paper?

2d. I wish to know if there is any good farming land in Sauk Co., Wis.?

3d. If there is and I am once at Cleveland, Ohio, which will be the best route for me to take to get there with my family, goods, &c.?

For I have made up my mind to make Wisconsin my home and engage in Agriculture in that state. If you will be so kind as to give me the information asked for, you will confer a favor on a friend. Not knowing your name I direct my letter to your office.

AUSTIN LIGHT.

REMARKS.—The price of the Farmer is 50 cents per year as you will see by the terms. We have never been in Sauk County; so we cannot speak of the quality of its land from observation; but from the best information we can gather, the land is good. We suppose it is more broken than in the southern counties of the state; but then it has the advantage of being better watered, if we have been correctly informed. The best route and conveyance from Cleveland, is by steamboat or propeller around the lakes to Milwaukee, thence by land.

Bots in Horses.

WHEELING, July 8, 1852.

MR. MILLER:

Dear Sir—Having seen a copy of your Farmer and Cultivator, I thought I would give some of its readers a valuable recipe for bots in Horses:

Take a handful of Rue (a garden plant) and steep it thoroughly—take of this one tumbler full, also equal quantities of milk and molasses, about a gill of each, stir them well together in a junk bottle and pour it down the horse, and I never saw it fail to cure in two hours.

Also, for gripes in horses:

Take two quarts of strong brine and with a cloth rub it on the spine from the mane to the hips and it will effect a speedy coure.

Yours, G. W. H.

Building Sod Fence.

FOND DU LAC, Sept. 19, 1852.

MARK MILLER, ESQ.:

Dear Sir—Can you give me any information about the method practiced for building turf fences? I and some of my neighbors wish to have a large amount of such fence built, but do not know to whom to apply. Any instruction you will give in regard to it will be thankfully received. Enclosed I send $1, as a subscription to your paper.

Yours truly,
L. H. PHILLIPS.

REMARKS.—Building turf fence is done by digging a ditch and raising a mound of earth along side of it with the earth taken therefrom. A turf fence, with two ditches, occupies a breadth of nine feet of ground and the method of construction something after this sort: The ditches on either side, are usually about 2½ feet in width at the surface, and 1½ feet at the bottom, and in depth about 3 feet, thus leaving a space of 5 feet in width between. In the first place the turf is cut from 4 to 6 inches in depth—of a suitable size superficially, to be conveniently handled, and laid aside—commence a mound about 2½ feet wide between the ditches, by throwing out the earth from either—to the sides of which as it rises in height, place the removed turf, with the grass side to the weather—and so continue to operate until the fence is raised to the desired height—A fence 3 feet at the base should taper to 15 or 18 inches at top. Most turf fences are built with a single ditch instead of two. The ditch should be upon the side most exposed to cattle, as it is intended to form a barrier as well as the raised mound.

EDUCATIONAL.

CONDUCTED BY J. L. ENOS.

For the Wisconsin & Iowa Farmer.

Teachers State Convention.

We the undersigned, practical Teachers of the State of Wisconsin, believing that the cause of Education and the circumstances of our profession demand greater concert of action among ourselves, would respectfully name ELKHORN as the place, and the 20th and 21st of October next as the time for holding a convention for the purpose of organizing a "*Teachers' State Association,*" and for the transaction of such other business pertaining to the interests of education as the occasion may require.

Arrangements will be made for addresses from different individuals and for the free entertainment of those that attend.

J. G. McMynn, Kenosha.
J. L. Enos, Madison.
W. C. Dustin, Burlington.
B. C. Rogers, Elkhorn.
L. Hutchinson, Prairie du Sac.
M. W. Carroll, Racine.
J. W. Boman, "
R. Baker, "
D. N. Conger, "
O. D. Robinson, "
A. Tibbetts, "
W. D. Cary, "
S. Steel, "
W. McNess, Fond du Lac.
A. J. Craig, Palmyra.
C. Lucas, Genesee.
G. A. Sellick, N. Rochester.
H. Coe, Kenosha.
A. Pearson, Madison.

Recommended also by several County Associations of teachers, and many friends of education.

For the Wisconsin & Iowa Farmer.

The Free School System.

The free school system is the noblest, most thoroughly republican, most vitally important to our political salvation of all our institutions. The man who does not give it his hearty support, is, through ignorance or design a stone of stumbling to the nation's onward march to glory.

To talk of republicanism without general education, is to talk nonsense. To talk of general education without the free school system, is to talk what never was and never can be.

I care not how much people may talk of what CAN be done, the matter of fact is, as it always has been, and always must be, the great mass of the youth receive all their school education in the common school. Indeed, it is *the* way to educate those, who are to mingle in the hum of business, and strife of politics—who are in fact to be *republican christian* America, the bond of early association, like a golden cord, may hold them together, as the ship of State careers in the storm that rocks the world.

The teacher, who makes the station a stepping stone to what he deems a higher station, has greatly mistaken the office. *There is no higher station.* The office is as respectable, as much to be respected as any in the world. None sheds more true glory upon its incumbent than this. Better far, that those who saunter about the school rooms, dreaming of high places, and who *stay* for the present for the sake of the pay, should leave the ground, to those who have a heart to appreciate the calling. E.

☞ Pof. Geo. R. Perkins, who has been principal of the New York State Normal School, since the death of D. P. Page, has resigned his post and the Executive Committee have secured the services of Mr. Samuel B. Woolworth, to take his place. This school has long took the lead in the education of teachers, and its graduates are to be found —the leading spirits in nearly every State of the Union.

How Scholars are Made.

"Costly apparatus and splendid cabinets have no magical power to make scholars. As a man is in all circumstances, under God, the master of his own fortune, so he is the maker of his own mind. The Creator has so constituted the human intellect that it can only grow by its own action, and by its own action it will certainly and necessarily grow. Every man must, therefore, educate himself. His books and teacher are but helps: the work is his. A man is not educated until he has the ability to summon, in an emergency, all his mental powers in vigorous exercise to effect its proposed object. It is not the man who has seen the most, or read most, who can do this: such an one is in danger of being borne down, like a beast of burden, by an over-loaded mass of other men's thoughts. Nor is it the man that can boast merely of native vigor and capacity. The greatest of all warriors that went to the siege of Troy had not the pre-emi-

nence because nature had given strength and he carried the largest bow, but because self-discipline had taught him how to bend it."

[Daniel Webster.

Diseases of the Season—The use of Fruit.

There were formerly certain undefined complaints during the latter part of the summer, familiar to every body in New England, termed diseases of the season, of which many died, and of which fruit was generally supposed to be the all powerful cause. A greater mistake was never made by an intelligent community, than to suppose that apples, pears, plums, peaches, berries, melons and the like, when fully ripe, are injurious, either to individuals who fall below the standard of sound health, or to the more strong and robust. It is a misfortune that fruits are so dear that the poorest people cannot have that of the best quality, and sometimes can have none at all. As all the laws of nature are harmonious, and one never conflicts with another, it is very certain that fruits were wisely intended as an essential part of the food of man, particularly at the season when they are ripe.—It is necessary to exercise reason in the use of them as in everything else.

If we eat that which is decayed or crude, it is a violation of a physiological law; and so also is a total abstinence from them when scattered plenteously over the land. Fruit, therefore, may be considered necessary to the maintenance of health, and its free consumption should always be encouraged. Those who cannot obtain the good, often ravenously devour the unwholesome, from an instinctive desire implanted in their nature. To the abuse, and not the proper use of fruit, may be charged the occurrence of what are called the diseases of the season.

[Boston Medical and Sur. Jour.

ANALYSIS OF MILK.—Milk consists of three distinct substances, viz: cream, curd and whey, into which it separates spontaneously in a state of repose. Cream, according to Berzelius, has a specific gravity of 1,0244, and consists in one hundred parts, of butter 4.5, caseous matter 3.5, and whey 92. On analysis, caseous matter yields, carbon 59.78, hydrogen 7.42, oxygen 11.500, nitrogen 21.38. When burnt it affords an ash amounting to 6.5 of its original weight, the principal part of which is phosphate of lime. Milk, when deprived of cream, has a specific gravity of 1.03, and in one thousand parts, yields of water 928.85, caseous matter 28, sugar of milk 35, muriate and phosphate of potassa 1.95. There are also noticeable traces of other matter.

[Olive Branch.

Grape Culture.

Valuable hints to beginners in the culture of the vine may be taken from an article in the Family Visitor, giving an epitome of the views of Hoare's treatise on the Cultivation of the Grape. We extract as follows:

According to Mr. Hoare no vine less than three inches in girt should be suffered to bear. The following is his table of the greatest amount of fruit which a vine can mature in proportion to the circumference of its stem.

Cir.	lbs.	Cir.	lbs.
3 inches,	5	7 inches,	45
3½ "	10	7½ "	50
4 "	15	8 "	55
4½ "	20	8½ "	60
5 "	25	9 "	65
5½ "	30	9½ "	70
6 "	35	10 "	75
6½ "	40		

It will be seen, says Mr. Hoare, that if 2½ inches be deducted from the circumference of the stem of any vine, the capability of it will be equal to the maturation of ten pounds of grapes for every remaining inch of girt.

To this proportion they are to be kept down by proper pruning, and removal of first buds and clusters if necessary, and finally the clusters themselves are to be severely thinned out, by successive clippings, before the stoning process commences. The berries are not suffered to touch each other's sides—the feebler ones removed—and the attempt made to have berries of nearly equal size at nearly equal distances. Many kinds of vines have, on every cluster, a long blasted shoot, with a few grapes, which never fully ripen, and which should be removed.

This process of thinning will secure from the same clusters an equal weight of far finer fruit.

It is no uncommon thing to remove half the grapes of a cluster, and in some cases even a much larger proportion. This will depend on circumstances.

"RATS AND MICE.—One of the best methods of destroying these pests, that I remember to have heard of, is the following:

Take a large kettle, or barrel; fill it nearly full of any thing that is most convenient, as waste grain, chaff, beans, earth, &c.; set it in the barn, or other place infested with rats; place a board for them to run up on; throw over the mass a quantity of meal, and let them feed several nights without interruption. Now empty the vessel and fill it with water up to about six inches of the top; throw over the surface a little chaff sufficient to cover it, and strew over this a little meal and arrange it as before. The rats will detect the trick when too late to profit by it. Scores have thus been taken in a single night."

EDITOR'S TABLE.

THE STATE FAIR.—Let it be borne in mind, that the annual fair of the Wisconsin State Agricultural Society, will be held at Milwaukee on the 6th, 7th and 8th inst. Every facility is offered by the various Railroad and Steamboat companies, for the conveyance of visitors, stock, implements, &c., to and from the exhibition. Let none stay away who can get there. The Milwaukeeans will have their "latch strings out," and be ready to accommodate all who attend in "apple pie order." Now don't take our word for it; but go and see for your selves.

THE MAILS.—The irregularity of the mails is becoming insufferable. The Farmer for August was mailed previous to the 29th of July, but from some cause or other, many of the packages had not reached their place of destination the first of September; and even since, we have received several letters complaining of the non-arrival of the August Farmer. If any of our subscribers have not yet received it, or any other No. on being informed of the fact, we will supply the deficiency, or at least try to.

THE NEW YORK STATE FAIR was held at Utica on the 7th, 8th, 9th and 10th of September. The concourse of people in attendance was immense, and the display in all departments on a grand scale. The receipts for entrance fees were about $8000. Complaint is made of the exorbitant prices charged visitors for accommodation. The City authorities of Utica made quite a speculation out of the occasion, by charging all conveyances running between the city and fair grounds, from 8 to 9 dollars each, which yielded to the city treasury about $2000.

WOODWORTH'S YOUTH'S CABINET.—Rightly named "Cabinet" for such it usually is; containing as it does a great variety of matter exactly adapted to the instruction and amusement of young people. F. C. Woodworth the accomplished editor is now traveling in Europe and preparing material for his Magazine.

The July No. commenced a new volume. D. A. Woodworth pub. $1,00 per year.

UNION ARTIST.—This is a useful monthly published at Pittsburgh, Pa., edited by R. D. Hartshorn.

It unites the Agricultural and Horticultural interests with Mechanic arts and thus adapts its pages to the wants of a large class of readers. Success to it.

TOBACCO CULTURE.—Milton H. Pettit, of Pike, has brought us a specimen of the Tobacco plants, of which he has a crop on his farm. This stalk is from three to four feet high, and some of the leaves are 33 inches in length and 14 inches in breadth. Mr. Pettit thinks that this growth, on land not specially prepared for the weed, and in charge of those, as yet without experienoe in its culture, promises pretty well, and we think so too. We could wish that no person had an appetite for tobacco, but inasmuch as they have, its culture in this section will no doubt prove profitable.

[Kenosha Tel.

MADERIA WINE.—Most disastrous accounts are received of the future prospects of Maderia. It seems not improbable that the celebrated wine of Maderia will be a matter of history. A blight of some sort has entirely destroyed the vintage for this year, and seems likely to destroy the vines themselves. It appears in the shape of a thick white powder, which entirely covers the clusters of grapes. The inhabitants have memorialized the Portugese Government to be permitted to cultivate tobacco.

The importation of wool in 1850 was valued at $1,681.000 showing an increase in the value of the importation the last year of over two millions of dollars.

MADISON MUTUAL
INSURANCE COMPANY.

Chartered by an Act of the Legislature of the State of Wisconsin.

HAVING duly organized and complied with the requirements of their charter, and adopted the most approved system of MUTUAL INSURANCE, are now prepared to receive applications and issue policies of insurance upon dwelling houses, taverns, shops, and other buildings against loss or damage by fire. This company will insure no property in cities or exposed parts of villages, therefore can never sustain a large loss from any one fire, which will enable them always to meet losses promptly, and make it a safe and reliable company to those insured.

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BOOK BINDERY.

THE SUBSCRIBER would respectfully announce to the citizens of Rock and the adjoining counties, that he is prepared to execute with dispatch, all kinds of work in his line in as neat style, and at as LOW PRICE, as can be done in our Eastern Cities. Having had long experience in all branches of the business at the east, he believes he can give entire satisfaction.

Especial attention will be given to the binding of PERIODICALS, MUSIC, re-binding old books, and also the manufacture of

BLANK BOOKS,

such as Deed, Mortgage, Records, Mill books, and School registers.

Every thing that may be wanted in the Blank Book line, ruled to any pattern desired, and bound in the most beautiful and substantial manner.

G. L. KNOX.

Janesville, April 1st, 1852. 1y4

The New Edition of
LAPHAM'S POCKET MAP

OF WISCONSIN, showing the surveys of the Menomonee Lands, &c., may now be had at the bookstores, or by application (accompanied by the cash) to the undersigned. It will be sent by mail to any address upon the receipt of one dollar. A liberal discount made to dealers.

I. A. LAPHAM.

Milwaukee, Aug. 2, 1852.

THE GROVE NURSERY & GARDEN.

LARGE Budded and Engrafted Apple Trees, with fine heads, at 15 to 25 cents each, or $15 per 100—Average sizes, by the thousand, $100 to 140. Plums and Quinces—a good supply, at 25 to 37½ cents each. Pears and Cherries—a small stock at old rates. Ornamental Trees, Flowering Shrubs and Plants, in great variety, and the lowest prices, in lots, principally at our selection. These last furnished to dealers on commission.

Address,
J. A. KENNICOTT.

Northfield, Cook Co., Ill.

MAY'S IMPROVED
PATENT STEEL PLOW!!

AT the Annual Fair of the Wisconsin State Agricultural Society in October last, these PLOWS received the Society's *first premium.*—For durability, easy draught for the team, large amount and excellent quality of the work performed, in a given time, they are *unequaled.* None but the best materials are used, and the most experienced and skillful workmen employed.

Hitherto we have been unable to supply the demand for these Plows, to obviate which as far as practicable, we have enlarged our works. Breaking and Common Plows, Cultivators and Harrows, as heretofore, made from the best patterns, and of the best material.

PRICES TO SUIT THE TIMES. Farmers give us a call.

Manufactured extensively, at Janesville, Wisconsin, by

MAY & COMPANY.

Janesville, Feb. 1, 1852.

N. B. Patents, Sample Plows, and Machinery, (Press and Shears, indispensable in making good work,) furnished to order and warranted; for the unsold portions of the Western, Middle and Southern States; also for California and Oregon. Agents wanted.

☞Infringements rigidly prosecuted, ☜

Address,
J. M. MAY,
Janesville, Rock Co., Wis.
General Agent for Proprietor.

A. H. STEBBINS,

Wholesale and Retail dealer in Hardware and Stoves at the old stand, No. 14 Main St., Racine, Wis.

Would respectfully inform the public that he is prepared to furnish every thing in the line of Hardware, consisting of Stoves, Sheet-Iron, Tin, and Copper Ware, Nails, &c., &c.

☞ All Job Work done to order.

Racine, Sept. 1, 1852.

CORN.—The corn crop of this county wears a promising appearance. Heavy yields will be gathered [Fond du Lac Jour.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., NOVEMBER, 1852. NO. 11.

PUBLISHED ON THE FIRST OF EACH MONTH, BY

MARK MILLER.

TERMS:

50 Cents a Year in Advance;

Five copies for $2, if directed to one Post Office, and at the same rate for a larger number. All subscriptions to commence with the volume. Back numbers supplied to new subscribers.

Wisconsin State Fair.

Our second Annual State Fair took place *a few miles west* of Milwaukee, at the time appointed; and has left an impression, which can not fail of producing a marked effect upon the future greatness of our young and prosperous State. But there is yet a wide field open for improvement. This Fair, in many respects, failed of meeting the expectations of most who attended;—still, it was highly creditable to the State, and to the taste and skill of those who *did* contribute to the exhibition. Some departments were not so well represented as we had hoped they would be;—knowing as we do—from what we have seen and heard of the several County Fairs,—that WISCONSIN has got the material to make a show, in all departments of industry, which would compare well with any one of the older States. Taken as a whole, however, the Fair passed off very well. The show was fair—the weather favorable, until near the close of the last day—the concourse of people large—and, so far as we could learn, not the slightest accident, or disturbance occurred, to mar the festivities of the occasion.

With so much to admire, and to commend,—we much regret that there should have been any just cause for complaint on the part of visitors, and *more especially on the part of contributors.* But, since so much dissatisfaction *does* exist,—it is but just to allude to it—hoping that in future, similar causes for complaint may be avoided.

One cause of complaint,—and a very just one too—was the site chosen for the Fair Ground; being some two or three miles west of the business part of the city, and between two lines of plank road—the only avenues, by which it could be reached. Visitors who were fortunate enough to have teams of their own, were subjected to a toll tax, besides a good deal of detention at the gates; while those who had not, were compelled to foot it, or to submit to the extortions of soul-less liverymen. The ground wasnaturally rough, and no care seemed to have been taken to improve it, even where the tent stood for the accommodation of the ladies department.—The ultimate object, we were told, of making the inclosure, was for a permanent Race Course, rather than for the accommodation of the Fair.

We regret still more, the wide spread disaffection which is felt amongst exhibitors.—They complain of having been badly used. Whether their grievances are real or fancied—we shall not at present pretend to say; but it is feared, in many cases, that they are too well grounded.

AGRICULTURAL IMPLEMENTS.

The display of Agricultural Implements, which first attracted our attention, was passable, but it fell far short of our expectations and of what it should have been. In the line of plows, the show was quite large, both in number and variety. Among the number, we observed some of superior make, and suited to all circumstances, and to all kinds of soil. A large number of the plows were from the Agricultural Warehouse of THOMPSON LITTELL of Milwaukee, and manufactured by MASON, NOURSE, & Co. of Boston. Mr. Littell also made a large show of other implements—num-

bering in all some 50 or 60—embracing in the list,— Cultivators, Horse-rakes, Churns, Harrows, Drills, Straw-Cutters, Meat-Cutters, Rakes, Forks, Spades, and in fine, almost every possible variety of garden, field and household implement, useful to the Farmer and Housewife. Mr. L's. collection made up one third, or more, of the whole display in this department of the fair. Mr. RICHARD E. ELA, of Rochester, made an excellent show of Plows, varying in size, from the tallest oak opening breaker, down to the lightest plow in use.—These plows, were of excellent model and workmanship—especially one Cast Steel Plow, which the Committee thought worthy of particular notice. Mr. Ela, also made a show in Fanning Mills, Corn and Cob Grinders, Cultivators, Harrows— and we believe some other implements; all of which were manufactured at his own establishment and under his supervision. A few Fanning Mills, Seed Drills, Corn Planters, Corn and Cob Grinders, and Threshing Machines, and a Reaper, made up the balance of the exhibition in Agricultural Implements. But one Harvesting Machine appeared upon the ground, (ATKINS' AUTOMATON REAPER and RAKER,) and which, with a Corn Planter, presented by Mr. A. P. DICKEY of Racine, contained all we saw new in the combination of machinery. This machine cuts the grain, rakes it into bundles and deposits them on the ground, ready for the binder as it passes along; thus, dispensing with the labor of one man, required by all other Reapers—an important consideration, here in the West, where laborers are scarce and wages high in harvest time. The novelty of the *raking* apparatus, attached to this machine, called forth the admiration of all who saw it operate.—Of course, the machine could not be tested practically, at the time, in standing grain; but it was driven rapidly over the ground, and in the opinion of every one, whom we heard remark upon it, there was no doubt of its capacity, to accomplish all that is intended to do. We have never seen a piece of mechanism before, which, in its movements, personated so completely the human arm, as the raker of this machine does. It is admirable, and justly excited more curiosity among the farmers, than any other object on the fair grounds.

STOCK:—The show of Cattle, Horses, Sheep and Swine, was good in quality, but in some cases extremely meagre in numbers. We observed many animals of a high standard—giving good evidence, that the breeding and improvement of all kinds of stock, are receiving increased attention, in some parts of the State. In no other department, was improvement so conspicuous—especially will this remark apply to sheep. The show of Spanish Merinoes, was fine. Among the exhibitors of this class, we noticed the names of Geo. O. Tiffany, of Milwaukee, Almond Atwater of Waupun, C. H. Smedley of Geneva, and W. P. Benson of Johnstown. M. E. Gaston of North Prairie, and J. Hinton of Eagle, were the principal exhibitors of Leicesters. N. B. Clapp, of Kenosha, had a fine show of South-Downs and Saxons—the former, beautiful sheep. Symetry of form, dark brown heads and legs, white fleece, long wool, and fine qualities for mutton, make the South-Downs most admirable animals.

Messrs. Hall and Kemp, of Gaines, Orleans County, N. Y., showed a superior yearling *Buck* and three *Ewes*, from their flock of full blood French Merinoes. The buck was as fine a fellow as we ever saw in a sheep-fold. We were informed by the owners, that he sheared, last spring, 20 lbs. and some ozs. of wool. One of the ewes, a three year old, sheared 18 lbs.. These sheep were for sale, and we hope they have been purchased and retained in the State. Messrs H. & K. had 75 half bloods—Spanish and French Merinoes, which they offered for sale. Mr. H. D. Weld of Greenfield, also showed a fine lot of French and Spanish Merinoes.

CATTLE:—The show of oxen was small—numbering but two or three pairs, all told. there should have been at least, 50 pairs entered, when we consider that ox teams are so generally used in the eastern part of the State. Of those on the ground, one, owned by Geo. O. Tiffany of Milwaukee, was a fine pair. The show of Cows was also very small, and among the number we noticed but one that attracted any particular attention. She was a full blood Devon—the property of A. P. Lyman of She-

boygan. Of Bulls there was a large show—including many excellent animals. Among the exhibitors, we noticed the names of H. Durkee, of Kenosha, A. P. Lyman, Sheboygan, J. Freeman, Lima, and R. Lake, Troy. Messrs Hall & Kemp, of Gaines, Orleans County, N. Y. presented a two year old Bull,—full blood Devon, unsurpassed for size and beauty by any other animal of his age on the ground.

SWINE:—In this department, the show was very small—few in number, and those, with two or three exceptions, of ornary appearance. S. B. Edwards of East Troy, exhibited two half blood Suffolk Pigs—a boar and sow. They are fine pigs and show a decided improvement in our common breed of swine. The sire of these pigs, is a full blooded Suffolk and belongs in Troy. Wm. Knight of Black Hawk, showed a sow, remarkable for size—her weight being between 600 and 700 lbs. in ordinary condition. Mr. Knight informed us, that last spring, she had a litter of 18 pigs, 15 of which she raised. One of them exhibited with her, looked like a chip of the old block.

HORSES:—The display of horses was numerous—consisting of Stallions, Brood Mares, Draft Horses, Geldings, Matched Teams, and Colts. There were some forty Stallions on the ground—many of which were noble animals. There were also, in the collection, matched teams, and brood mares, as fine as the most fastidious Jockey could wish to see; and which, indicates marked attention to good breeding in our State.

POULTRY:—There was quite a collection in this line,—much larger than we had expected to see, and some of them were fine birds. The Shanghai, Chittagong, Cochin China, and some other varieties were represented. We should judge the show of Poultry highly creditable to exhibitors.

THE DAIRY:—The exhibition of dairy products was small; but very fair in quality. We noticed some as fine specimens of Cheese, as we have ever seen any where, and the same remark will apply to the show of cheese at the Rock County Fair. It would seem that this branch of the dairy business, is receiving more attention in our State, than the manufacture of butter; and it will unquestionably make a better return for capital and labor employed, until butter commands a higher price at home, than it has done generally heretofore. There is no better cheese made in any state, than we have seen from the dairies of Wisconsin—we will not except even the celebrated Herkimer, Hamburg or what-not; but we will not brag on butter yet. With the facilities, now opening, for reaching the eastern markets at all seasons of the year, there is no good reason why butter should not become one of our most important staples. Our pasturage is unsurpassed by that of any other section of country, both for quality and abundance of feed—we have good water—what else is wanting? nothing but proper skill in the business, which may be easily acquired.

STOVES AND CASTINGS:—Messrs. Decker & Savill of Milwaukee, were the only exhibitors in this line. They showed a good assortment of Stoves, Hollow ware and Castings—all of their own manufacture, and admirably done.

FRUIT:—The collection of Fruit was a very attractive feature of the Fair, and would have made a splendid show, if it had been properly displayed. But with this, as with every thing else in the tents, the fitting up and arrangement was supremely miserable. The benches and stands, prepared for the reception of articles, were a mere sham—constructed in the most uncouth manner, apparently without regard to any arrangement or form, calculated to show off their contents to advantage. John Bell of Gardner's Prairie, presented 42 varieties of Apples, besides a good show of Pears, all grown in his own Nursery. F. K. Phoenix of the Delevan Nursery, made a fine show of Fruit, consisting of Pears and 50 varieties of Apples. Orra Martin, of Spring Valley, showed some fine Apples, not numerous in variety, but superior for their size and quality. We noticed some fine Grapes, but did not learn to whom they belonged, or where grown.

PLOWING MATCH:—One ox team, one mule team and six horse teams were entered for the Plowing Match.

The military display was a slim affair. It was what politicians, now-a-days, would call a *fizzle.*

We saw many other things at this great gathering, which we should be pleased to notice; but our limits will not permit.

The County Fairs.

In making up a report of the several County Fairs, we are dependent in a great measure, on correspondents and our exchanges; as we were unable to attend any of them,

except that of our own County; from the fact that they all occurred at about the same time. Racine, Walworth, and Rock, held their fairs simultaneously on the 28th, and 29th, days of September.

A lively interest seems to have been taken in most of the County Fairs; as manifested by their extent of show, and the general satisfaction in their results. Some of them, in many particulars, have been quite equal to the State Fair.

Dane County.—The Dane County Fair came off first, and was held at Madison on the 23d, of September. The Madison Journal says: "The demonstration was one of which our farmers have just reason to be proud, and gave assurance that the society in this county is bound to flourish. The stock exhibited was good, showing that a great interest is felt among our farmers in regard to the improvements in this line. Various specimens of grains, vegetables, &c., were exhibited of magnificent growth. Butter, apples, pears and grapes, and other fruits were to be seen in respectable quantities and of superior quality. The display of the ladies, in the way of needle-work, paintings, pencellings, &c., was highly creditable to them. In short, the whole thing was of high order, seldom or never surpassed by any county in its first attempt."

A fig tree of two years growth was exhibited by J. G. Knapp, on which were nine figs. One of the teams on the ground, consisted of twelve pairs of working oxen. And the *Aagus* pronounces the show of horses better than at the State Fair.

Dodge and Jefferson Counties.— The Watertown Chronicle says:—"The first annual fair of the Jefferson and Dodge county agricultural society, held at Oak Grove, attracted more interest than the most sanguine friends of the society had dared to hope. The number in attendance could not have been less than 1500 or 2000, including a large number of ladies. The display of cattle was very fine. We were not aware before, that so many really good oxen and cows were to be found in this section of the state. This fair has given very general satisfaction. It has also excited a spirit of laudable emulation on the part of our farmers and mechanics, the good fruits of which we may expect to see developed at future fairs."

Walworth County.—The Elkhorn Star says:—"The Annual Fair of the Walworth County Agricultural Society, has just closed. The number of people in attendance has been large of both sexes. The exhibition has been highly creditable to the enterprise and good tastes of our citizens. The specimens of stock upon the ground were excellent. Horses, Cattle, Sheep, Swine, and Poultry, could hardly be beat in any part of the country. The ladies come in for a fair share of credit in the merits of the exhibition for specimens of their handi-work.

The Stock in Walworth is improving, and a laudable spirit of enterprise is inspiring our people to go ahead and make still greater advances."

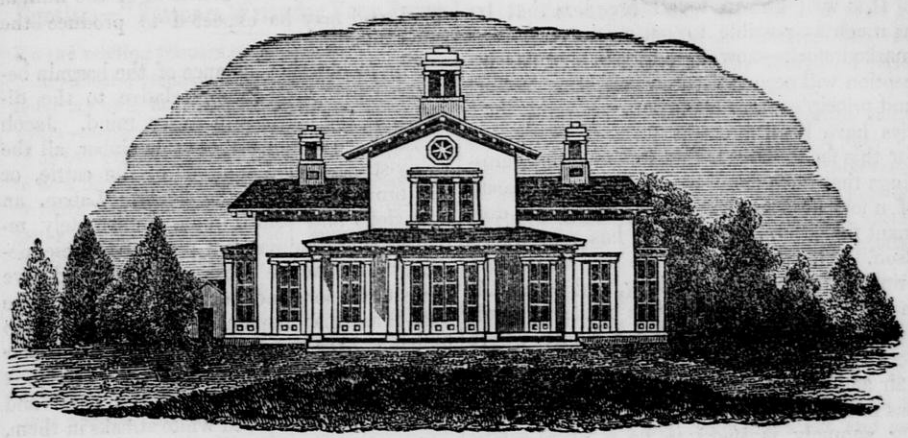
Sheboygan County. We learn, that the Sheboygan County Fair, held at Plymouth, was poorly attended, on account of the inclemency of the weather.

Rock County.—The Agricultural Society of this County, held its second annual Fair at Beloit, on the 28th, and 29th days of September. It was a grand rally of the farmers and mechanics of old Rock, and far exceeded in every particular, the highest expectations in its results. The arrangements were most excellent, and the exhibition in every department, such as would have done no discredit to almost any county of any other State. No unusual exertions were made to bring about this gratifying result—the movement was spontaneous on the part of the people of the County. In fact, so little was said about it, previous to the day of meeting, that many indulged forebodings of failure. But all were happily disappointed.

The Ladies were out in full force, (the grand secret of success) and aided materially to the interest of the occasion by their valuable contributions. The citizensof Beloit, are deserving of all praise, for their unbounded hospitality to visitors, and for their liberality and good taste, displayed in fitting up the fair grounds, at an expense to themselves of nearly $300. The Officers of the Society are also entitled to great credit, for the efficiency with which they have conducted its affairs.

The attendance was large. The Beloit Journal says, "we are told by those who attended both, that the number in attendance was greater than that at Janesville last year, when the State and County Fairs were combined; and as corroborative, we are informed that more tickets were sold."

New Paper at Madison.—Col. Atwood, formerly of the *Express*, has commenced a new paper (daily and weekly) called the *Madison State Journal*. The Journal is a large and handsome sheet. Of the ability with which it is conducted, we need not speak; for Col. Atwood has been connected with the *Press* of Wisconsin too long, not to be known as one of its ablest conductors.



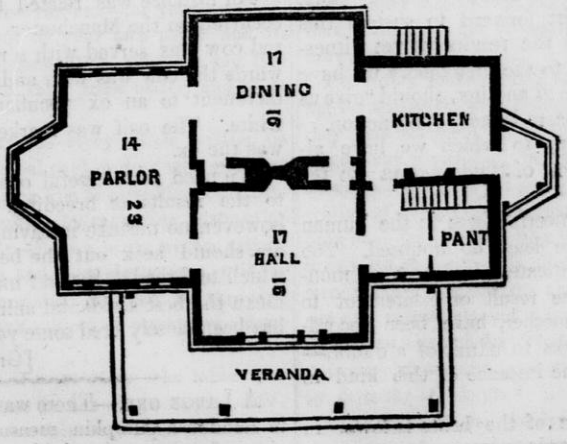
Plan for a Cottage.

We copy the accompanying engravings representing the elevation and ground plan, of a small villa, from the Scientific American.—It was designed by A. J. Davis, Esq., of New York and erected at Rahway, N. J.

"The plan of the principal floor shows, besides the entry, a parlor, a saloon, a dining room, a kitchen, and a pantry. Not an inch of space is lost, and the arrangement of the stairs and passages, in the second story, is so complete that six good bed-rooms are afforded.

The exterior, without making pretensions to ornamental effect, is well composed; the proportions are good, the style is well expressed, and the whole is altogether satisfactory to the eye and the judgment.

The verandah, which extends along the front of the building, gives an expression of great comfort to every house, in a climate where shelter and repose are so necessary in certain hours of the day, as in ours, and where a verandah is, therefore, as indispensable as almost any apartment in the dwelling."



GROUND PLAN.

Effect of Imagination on Cows.

It is well known to all breeders that try as much as possible to get a pure and well marked stock—now and then a singular exception will occur to throw all their notions and principles into confusion. Several theories have been brought forward to account for this fact. One is that in the various crossings that have taken place, some peculiarity of a forgotten ancestor, after having lain dormant for several generations, has reproduced itself. This is admitted as an undoubted principle in human physiology, and without it sad work would sometimes be made in families. We have in our mind, a family where both the parents are of dark complexion, black hair and eyes, and where one of the children has red hair and light blue eyes. This seeming anomaly is maid to be a plain affair, when we know that in the mother's family one of the parents was possessed of a red head with blue eyes, and a portion of the children had a similar complexion. The same principle holds good of diseases. Certain hereditary diseases may not be visible in an entire generation, and yet make their appearance in the next generation.

Another theory, by which these exceptional products are accounted for, is that if a cow or mare have young by any particular male, the young while in the womb and possessed of a nature, constitution and peculiarities similar to and derived from said male, produces a change in the nature, blood, constitution &c., of the female, to such an extent, that in any after connection with a different male there is a liability that the taint of the original impregnation may manifest itself in those succeeding. Facts, apparently incontestable, have been brought forward to sustain this position. That all the results as yet witnessed, not assignable to the first theory we have mentioned, may be to another, should "give us pause" from any haste to adopt the notion.

The third theory to which we have alluded, is the effect of *imagination on the mother.*

That this is a powerful force in the human race, cannot in the least be doubted. Too many well authenticated instances of monstrous births, as the result of excitement to the mind of the mother, have been recorded in scientific works to admit of a doubt.—Every one has some instance of this kind in mind.

The imagination of the brute is lower in the scale, as regards power of extent, or quickness of action—but is not different in every essential particular. Hope, fear, love, friendship, disgust &c.,—are as really properties of the mind of brutes as of the human mind, and may be expected to produce the same effects.

The memorable instance of the bargain between Laban and Jacob, relative to the division of the herds is in every mind. Jacob was to have as the wages of his labor, all the "ring-streaked and spotted" of the cattle, or the brown sheep of the flocks. Laban, an avaricious and selfish man, immediately removed every animal that possessed these peculiarities from the flocks and herds, and gave them to his sons and put under Jacob's charge only those that remained. Jacob resorted to influence over the imagination, to secure for himself a fair return for his labors. He "took rods of green poplar, and of the hazel and chestnut tree and pared white streaks in them, and made the white appear that it was in the rods." He placed these rods by the brook, or the gutter of the watering trough when the flocks came to drink, "that they should conceive when they came to drink." To show clearly that the effect produced was through the eye and mind of the individual operated on, it is remarked, "And it came to pass whensoever the *stronger* cattle did conceive, that Jacob laid the rods before the eyes of the cattle in the gutters, that they might conceive among the rods. But when the cattle were feeble, he put them not in, so the feeble were Laban's and the stronger Jacob's.

An instance is recorded that a pure blooded polled cow was served with a pure blooded red polled bull. During the day however, she had been with a red and white horned ox. The calf produced was red and white, and horned.

An instance was related to us as having occurred on the Manchester City Farm. A red cow was served with a red bull. Afterwards the cow was with and had quite an attachment to an ox peculiarly marked with white. The calf was marked with white as was the ox.

We need more careful observations relative to the results of breeding. There can be, however, no mistake in saying that all breeders should seek out the best animals from which to breed. By *best animals* we do not mean the best accidental animal, but one who has been closely bred some years.

[Granite Farmer.

A LARGE ONE.—There was lately exhibited in London a pumpkin measuring six feet in circumference, and weighing about one hundred and fifty pounds. It grew from seed sent from Canada.

For the Wisconsin & Iowa Farmer.

Egotism—"Farmers Write for Your Paper."

To the reading farmers of Wisconsin:

My Dear Friends—The heading of this letter is for my own benefit—the motto quoted—is for yours—Some writers avoid the capital I as carefully as bad grammer; but "Dr. Kennicott" is known to be a little given to egotism, though I could never learn that he had much vanity—and, then, the letter I comes in so handy, and saves a world of unnecessary circumlocation.

Now, the truth is, I am in a bit of a quandary—I have a letter from the editor to-day, gently insinuating that my articles are very acceptable, and that he has not any too much "copy" on hand—But here is the rub—I do not like to fill quite so large a space, and stand so much alone, as a regular contributor to the Wisconsin Farmer—I am a stranger to most of you, and though near by, I do not live in your state—and I fear you will deem me arrogant, if I continue to lecture you, as I have heretofore done. Though necessity and a love of science made me a physician, I was born a farmer, and remain a farmer still—but I am not content to "do as my father did before me"—plow, and sow, and reap in the old fashion—for I have learned that there are better ways, and I like to tell others so; and I have written a good deal in my day, just as I talk, and without the least reference to grammer, of which I know little, or the learning of school men, of which I know nothing at all.

Now, if you are satisfied with what I write, why not write a little yourselves? You *can* write, if not so glibly, yet more sensibly, and more to the purpose than I do—and for one, I think it is about time for some of you to rest from hand-labor, on rainy days, and take up this little implement of head labor—THE PEN—for your own benefit, and the benefit of your own paper and its many thousand readers.—You need not say that you can not write, for I know better, and so do you.

Remember one truth—every article written on a scientific or practical subject does some good—to the writer, by causing him to investigate the subject, and to the reader, by conveying instruction or exciting thought—Even a badly written article, with wrong facts and false deductions, will do good by causing enquiry, and end by throwing more light on a dark subject, or placing an old one in a better light.

The great fault of most of us who labor with our hands is, that we do not THINK enough—We allow others to do our thinking, when we could do it much better ourselves, if we would only try; and depend upon it, there is no way by which one can get at the true merits of a subject in which he is interested, so effectually, as to attempt to show others by *writing* about it. A writer must think, and very few who write for OUR press are willing to risk a mistake, and therefore they read, and observe—So, you see, the thoughtful writer benefits himself as well as his readers.

The fore-going remarks are intended mainly for those who do not write at all, but they will apply to some who write only at long intervals.—There is, however, another class, of practiced writers, whose excellent essays I read in eastern papers, or who send all they write to the partizan press.

This is all wrong—eastern journals have no need of western contributors, and what to their readers is only curious history, would be highly encouraging, and instructive to those of the Wisconsin Farmer. Your own state agricultural paper is certainly a most respectable one, and compares favorably with the best, in everything, save the amount of original matter, and that sent off, or hid in the political sheets would be more than enough to fill the pages of "your paper.

I hope you will think of this, my friends, and I hope also, that the half-dozen regular old correspondents of the Wisconsin Farmer will write a little more themselves—they would do good thereby, and help onward the march of agricultural improvement, and the cultivation of the MINDS of farmers as well as their broad acres.

Unfortunately, the producing classes have no schools of rural art and science, or practical mechanics, or specific "knowledge of the things next to them," in these United States—our only lectures come through the agricultural Press—and our only cabinets, and collections, for practical demonstrations, in the arts and sciences which aid labor, are to be found at the Fairs of our State and County associations. These we must support then, until those can be created—and the time is drawing on.

For thirty years reading farmers have been asking for an agricultural college in New York, and they have not got it yet—Since the days of Washington, our wisest statesmen have occasionally recommended the interests of agriculture to the attention of our national legislators, but nothing has been done for it. And why is this? The reason is as plain as the fact is discreditable—Few farmers think for themselves, and very few speak or *write* for themselves and their specific interests.—So long as a speech for "buncombe" will satisfy the voter, his specific interest will receive the go by, from the legislator.

If we would hasten the day when every interest shall be protected and encouraged, in proportion to its value and the numbers engaged in it—we must *write*, and we must meet together, and talk over our own affairs and do our own THINKING, and

our own voting too. The moment we take a decided stand, politicians will find out that we have specific interests—but we shall never take that stand until we familiarize ourselves with each other, through our own papers, and take each other by the hand, at our associations, fairs, and conventions.

But enough for once—How many thousands of you shall I meet at your State Fair in Milwaukee? How many will read and heed the quotation at the head of this hasty letter? "FARMERS WRITE FOR YOUR PAPER."

Very truly your friend and co-laborer,
JOHN A. KENNICOTT.

The Grove, Ill., Aug. 1st.

For the Wisconsin & Iowa Farmer.

Wisconsin—Face of the Country, Resources, &c.

We have noticed in a column of a western paper of recent date, an article respecting the country and prospects of Wisconsin, and from the tenor of the author's remarks, we have imbibed the impression that the country and its inhabitants have been much misrepresented—(either through ignorance or design) by some person writing to eastern friends.

Having been a resident of Southern Wisconsin for eight years, we assume the prerogative of giving a brief, but impartial account of the country, its inhabitants, soil, climate and principal productions, so far as has fallen within the circle of our observation. The State of Wisconsin, so far as we have observed, is in possession of a climate strongly resembling that of the State of New York in the same latitudes. The soil in most parts of the State is exceedingly fertile, especially that of the prairies. The timber-lands generally do not possess as deep a soil as that of the prairies; but they are preferred by some residents for farms, on account of the contiguity to timber. The lands of southern Wisconsin are alternated with prairie and timber. The prairies are of various forms and sizes,—from half of a mile, to many miles in extent. The surface of the prairies is generally level, or moderately undulating—sometimes interspersed with occasional ravines, but all susceptible of cultivation. The timber lands generally are somewhat rolling but mostly susceptive of easy cultivation,—and in some places we have seen very extensive tracts of timber land almost entirely level. The varieties of timber in Wisconsin are numerous; the principal, are Maple, Oak, Walnut, Whitewood Ash, Elm, and Bass wood. In the central and northern parts, there are large forests of pine, from which, vast quantities of lumber are rafted down the principal rivers for market. Burr-oak openings form the largest part of the timber lands of Southern Wisconsin. The soil of the openings is considered as among the best for wheat. In tilling the soil of the openings, the Burr-oak timber presents far less obstacles in plowing than might be imagined—as the roots are so far below the surface that a plow may run close to the bodies of the trees without being interrupted.

Having merely glanced at the climate of our State—we would resume that topic by saying that the climate may be readily estimated by the productions of the country. The following are the principal productions, viz., Wheat, Oats, Barley, Corn, Buckwheat, Millet, Flax, Potatoes, Peas, Beans, &c., together with Cabbages, Onions, Beets, Carrots, Parsnips, and vines of different varieties, and finally all kinds of vegetation incident to the same latitudes in the Middle and Eastern States. We have many varieties of wheat here, and all flourish well. Spring wheat is sown here from the fore part of April, to the first of June, and has generally yielded well. Some seasons the crop has not done as well as others. There are likewise many kinds of corn raised here, among them are the following, viz., the Southern Dent, including the yellow and the white; besides many other kinds of small corn, including different varieties of sweet corn. The Southern Dent, is the largest corn grown here, and is considered the most productive. The soil of our prairies is considered inexhaustible in quantity, so much so, that farmers often burn their stubble on the ground, and their straw in heaps, with the exception of what is necessary for the use of their stock through the winter. As to the ease of tilling, we think that the soil of the prairies stands unrivalled by any that we have ever seen.

Stock is becoming an article of much consideration; many droves have been brought

from the State of Illinois into different parts of Wisconsin heretofore, but the demand is getting to be much less imperative than formerly—as the farmers generally are raising their own stock, and many have a surplus with which to supply the wants of emigrants. As to the health of our climate—we think that no part of the union furnishes a better specimen. Chronic diseases are of rare occurrence here, and unless engendered else-where, we know of no cases of the kind. There are portions of the country where marshes are prevalent, and many emigrants settle near them on account of the convenience of surface water for the use of stock; such situations are not considered as healthy as the dry lands, either prairie or timber—as the settlers are somewhat subject to billious complaints.—We consider, however, that the climate of the State, taken as a whole, is very healthy, and peculiarly congenial to longevity.

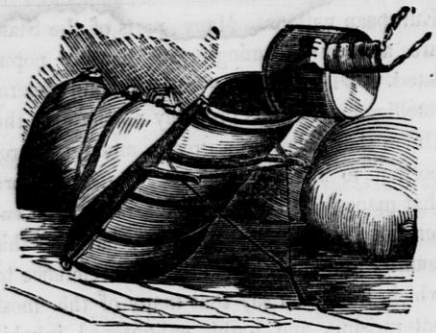
The weather in Summer upon the prairies is delightful, on account of gentle breezes which are quite prevalent, and contribute largely to render the atmosphere balmy and salubrious.

The thermometer, sometimes however, indicates quite a high temperature, especially in the timber lands, where more obstacles are presented to impede the progress of the moving air. We do not remember of ever having inhaled a more balmy and fragrant atmosphere than is wafted over the surface of our luxuriant prairies from May to October, and never have our lungs been inflated with a more exhilarating and bracing draught than is presented from early dawn, to the entire expulsion of the morning dew. Our winters are often quite mild, with the exception of a few days of severely cold weather. Good sleighing for any length of time is quite rare. Snow seldom falls to exceed two or three inches in depth. Our roads are often quite passable for wheeling in the winter season; and after the ground has settled in the Spring, they are among the best that nature has ever furnished. The tide of emigration to different portions of the State does not seem to abate. There are emigrants from all parts of the Union, together with many from different European nations. Many parts of the State are already becoming quite densely populated. With regard to enterprise and general intelligence, there is probably no State in the Union that furnishes a greater amount, in proportion to the population. We are aware that many wild chimeras have often been entertained by eastern papers, relative to this country and its inhabitants;—in reference to which, we would say that many of the most enterprising, and highly enlightened inhabitants of the eastern and middle States, together with some from all parts of the Union, have settled here for the purpose of securing homes for themselves and families, where land is cheap, and the soil is fertile; for (Chacum veut etra heureux) and where they can sit down and eat and drink under their own vine and fig tree. The luxuries of a fertile and healthy country still present an extensive field for emigration, where, with a small capital, many thousands may possess a sufficiency for themselves, and have a competency for their posterity. (a expedit b reipublicae, et a interest b ommium.)

The inhabitants from all parts of Europe and America do not assimilate in all points of etiquette; but as to quietude, harmony and civility; we think that it universally prevails. The march of science here, as elsewhere, is onward, and upward. Our common schools are numerous, and usually furnished with well qualified teachers. The select and classical branches are taught in most of our interior villages. Christian Churches of different denominations are numerous. The manners and customs here, as far we are acquainted, are the same as in older States.—In all the departments of industry, there seems to be much intelligence exhibited.—The disposition to aristocracy as evinced by some of the inhabitants of other States, does not prevail here. And finally in all important points, we think that the universal disposition evinced in this community, strongly indicates the characteristic of a great and magnanimous people. W. W. S.

Harmony July 1st. 1852.

Beef and Pork.—Our butchers are paying $4,50 to $5,00 for Pork, net, and $5 for Beef on the hoof. [Burlington Tel.



The Bag Holder

This engraving is a perspective view of an apparatus for holding up a bag and keeping its mouth open so that a man or boy can fill it up quickly without having another person to hold the mouth stretched while filling. It is composed of two pieces or supports of wood or metal with an oval band or hoop at the top having hooks on it at three points. The bag can have the hoop sewed upon it, or it can be hooked around the hoop, and its mouth kept open. There is a back standard consisting of two metal arms united at the foot, which has a broad base, or a prong on it. This standard is shaped like a V and braces the two side supports. It is secured by hinges or by pins to the two side supports to allow the apparatus to be folded up and carried about under a person's arm. It can be made light and strong, and in many places where grain is thrashed by a machine on a field, it must be very convenient—in fact it is useful in all places where a bag has to be filled—and as such we think it is worthy the attention of our farmers. We never saw an apparatus like this in our country, nor do we know that one has ever been made, but many of our farmers are handy enough with tools to construct them for themselves—the engraving alone, will be sufficient along with this description to guide them. [Scientific American.

Pine Wool.

It is an old adage that "wonders will never cease;" and so long as wonders consist in new productions of utility and value, we hope they may not cease. One of the more recent announcements of wonderous character, is an account published in some of the German papers and republished in the Farmer & Mechanic, of the manufacture of a fibrous or woody substance from the leaves of the fir and the pine. It is callled vegetable wool, and has been discovered by Mr. Pannewitz, who has succeeded in extricating it from the aforesaid trees. It is also stated that a manufacture of this species of wool has been established for some time past at Breslau, near Silesia. According to the account, any of the fir and pine tribes will afford it.

The fibrous material is found in the leaves, and is held together by a resinous substance, which is dissolved out by alkalies, which leave the woolly matter untouched.

The account goes on to state that coverlets, blankets, and other articles of vegetable wool, have long been employed in Austria and Vienna, especially in some of the charitable institutions. And these materials are represented as being warm, durable, and agreeable to the eye; and what is also very desirable, they enjoy the excellent quality of preserving a certain balsamic and rather pleasant odor, which is at the same time so inimical to insects that they never harbor in it.

What do you think of that, gentle reader of the Farmer? Only think—every pine and fir tree in Maine should be looked upon as a permanent, quiet, and immoverable good old sheep—requiring no food but what it sucks up from the ground or draws in from the air, and no shelter but the clouds and the skies above, and yet every year producing and shedding a comfortable fleece of wool, which may be had for the gathering and preparing.

Verily, the spruce swamps and pine forests of Maine will have a new beauty in the eye of the utilitarian, for, in addition to their valuable material for buildings to shield you from the blast, and for fuel, to warm your dwellings, in their crowded evergreen foliage there nestles lots of wool, from which blankets and garments for the comfort and protection of mankind may be manufactured. It is a subject worth carefully examining into at any rate. If a Dutchman can make wollen blankets out of pine brouse, the Yankees will soon be making mousselin de laines, or rather mousselin *de pines*, of it. [Maine Farner.

FATTENING CATTLE IN STALLS AND IN SHEDS.—An experiment has been made in Scotland to try the comparative value of these two modes of fattening cattle. Ten animals having been chosen were divided as equally as possible; five were put in a sheltered court with plenty of shed room, and the others into boxes. At the beginning of October it was soon found that those in the court eat 134 lbs. per day, while those in the boxes eat only 112 lbs., or 22 lbs., less, thus proving that a certain degree of warmth is equivalent to food. After seven months, towards the end of April, they were all slaughtered, and the following results were found:

Cattle fed in boxes Beef 3,262 lbs. Tal-

6,678 lbs. Cattle fed in courts do. 3,416 lbs. do. 6,054 lbs.

These results show the superiority of feeding in boxes. It is thought that in a less mild winter they would have been more striking. In the course of the experiment the thermometer rose to 50 degrees, and the cattle under cover seemed to suffer from being too warm. It was found a trifling expense to comb them regularly, which speedily produced a very marked improvement.

[Tribune.

GLANDERS IN HORSES—*Caution.*—As this is a most formidable disease, and is becoming prevalent in this country, the subject deserves careful investigation. I lost a valuable horse in June. He took the disease of another horse early in the winter, and exhibited symptoms similar to those of horse-ail until his head became curious in every part, when he died. It was only by timely warning from one who knew the nature of the disease, that I escaped the dreadful malady. The American Veterinarian reports many cases of persons falling a prey to this disease, by taking it from horses. It is as fatal as small pox, and those who have the care of glandered horses should be careful how they manage, till they learn the nature of the disease. [Cor. Eastern Mail.

Curing Corn.

The Middlesex Farmer says: The old practice of topping corn seems of late to be giving place to the new mode of cutting up at the ground and stooking up till the seed is fully ripened. The friends of this mode claim that the harvesting can be done easier in this way; that the grain is heavier and the fodder much better. Of the truth of the first of these reasons, we have our doubts. In regard to the second if the corn is well glazed before being cut, we see no reason why it should not be as good, and in regard to the third reason, no ono will dispute but that the fodder will be better if cut early than if left to be washed, as it often is, by the October and November storms.

Artesian Wells in Arkansas.

The Dallas (Ala.) Gazette says that the first Artesian well of Mr. J. E. Mathews, in Cahaba, is completed. It is 735 feet deep, and sends forth a stream of water measured at 1,200 gallons per minute. The famous French well at Grenoble, it is said, does not discharge more than half this quantity.—"The water (says the Gazette) boils up, roaring like a cataract, forming a branch of considerable size, and the low grounds, some two hundred yards distant, require ditching, to carry off the immense quantity of water collected upon its surface.

Mr. Reid, the successful borer of this well, has commenced boring another, some sixty yards distant (for Mr. Mathews) which will be some 1,500 or 2,000 feet deep. To prevent injury to the first, it is necessary to make the second one much deeper, so as to reach a different stratum of water. The first well is tubed, as the second will be.

Mr. Reid is also boring a well for Dr. English, two hundred yards distant from Mr. Mathews. It is now 536 feet deep, and discharges 200 gallons of water per minute."

A correspondent of the Gazette gives the following in relation to the first well of Mr. Mathews, which was bored for the purpose of obtaining sufficient water to supply a steam cotton mill:—

First, a well was dug in the ordinary way, 32 feet through the red clay sand and gravel lying upon the rotten limestone. A large pine log was then procured, and a hole 3¼ inches in diameter bored through it. After sharpening the end, and putting an iron band around it, the log was put down and firmly driven and forced into the rock. The well was then filled up—the upper end of the log appearing about a foot above the surface.—The boring then commenced, and, with the various tools and contrivences of the art, the earth was rapidly penetrated.

As each lower sheet of water was reached by the tools, the water was thrown up by the whole in great quantities and with more violence. When the "first water"—that is, the water just below the first sand stone—was reached, the upward flow of the water did not exceed seven gallons per minute. It was increased to one hundred gallons when the second sand stone was perforated, and on reaching the third sheet of water, upwards of 300 gallons per minute rushed up through the orifice, seemingly impatient of its limits.

Thinking that the quantity of water would be increased by enlarging the hole, they rimmed out 9¼ inches in diameter, and 530 feet deep, to the sand stone lying above the third bed water, and inserted a tube from the first, and resting upon the third sand stone. They were not disappointed. The water from a small stream became a large column rushing upwards with violence, at the rate of 1,300 gallons per minute, and running off in a considerable rivulet. [Scientific American.

Orchards, Hogs, &c.

The following remarks upon a diversity of subjects connected with agricultural pursuits, we collate from conversations at a series of Agricultural Meetings, held by the members of the Maine Legislature, during the last session, and published in the Maine Farmer. These remarks seem to come from men of practical experience, and so far as they refer to the course of treatment, to be observed in the management of orchards, are at issue with the recommendations of our Western Horticulturists. From the observations made by some of the speakers, it would seem that cultivation among apple trees, has proved injurious to their growth and bearing in Maine. This we know is also true of other localities in New England. In the southern part of New Hampshire, upon our old homestead, has stood, for more than fifty years, and still stands, an orchard of apple trees of great size,—many of them measuring at the but, more than two feet through with corresponding tops. This orchard has been in grass so long as our memory runneth back, (about thirty years) and has never failed to our knowledge, of producing annually a bountiful supply of fruit. Another orchard on the same farm, and but a few rods distant, which used to be plowed and cropped, has gone entirely to decay years ago.

Our Western Nurserymen and Horticultural Writers, *all*—recommend cultivation among fruit trees. Can any one of them, explain the cause of the comparative early decay and loss of the trees, here referred to; or tell us why they were less fruitful, than those growing in equally as favorable a situation, but in uncultivated soil?

"Mr. Webster said that he had derived many valuable hints respecting stock growing, from Colman's Agriculture. The Durham Short Horns were regarded generally with great favor, and to a certain extent they were very useful stock to raise—but he preferred the North Devons. The Durham oxen grew large, but were not hardy, and the cows not the best milkers. The North Devons are the best stock, they grow quick, and the cows are good for milk. There was no difficulty in making the Devons come up to six feet and ten inches in girth at five years. He had a North Devon bull, seven feet and five inches in girth, weighing 2200 lbs., which he worked by the side of another nearly as large.—He sold a yearling bull last fall, to go to Baldwin, for $125, and two bull calves of the same breed for $50 each. The true Devons were of bright red color, with branching horns, and were decidedly, in his judgment, the best stock to raise. In regard to raising calves—the best plan was not to let them go out and stay in the sun any time until a year old. He learned this from English authors; and his experience attested its correctness.—The yearling he sold for $125, and the calves he sold for fifty each, were reared in this way. Mr. Webster gave the reason why calves were injured by the practice of letting them out to grass. He kept his calves on skim milk warmed, and gave them oat-meal. They can be raised as cheap at the barn as when turned out to grass.

BREEDING AND FATTENING SWINE.

He kept quite a little family of swine, had always from forty to seventy-five, and had had one hundred and twenty-five at a time. It was his opinion that sows should not be made breeders until they were three years old, and if they were found to be good for that purpose, should not be turned away at less than five. Mr. Webster said that he could raise pork at four and a half cents per pound—in fact pork could be raised cheaper than beef. He killed, this year, two pigs eight months old, one of which weighed four hundred and seventy pounds, and the other over four hundred and fifty. It was his opinion that if attention was given to the breeds and manner of feeding, they could be made to reach an average weight of three hundred and fifty pounds at eight months old. A quart of corn meal per day was enough, on an average, until eight months old. He cooked his meal, and gave his hogs one gill of molasses each day, with a plenty of water.—He had sixty shoats which he should keep at less than one and a half cents per day, feeding them upon boiled turnips and fresh clover hay, well cured. His breeding sows he kept on shorts, which he had boiled, adding to them some ten pounds of scraps to each barrel full. The scraps he bought in Brighton, at $20 per ton; the tallow was out of them, and they were pressed together and could be easily cut and put into the kettle.—The shorts and scraps gave the sows a good flow of milk.

PLOWING ORCHARDS.

Mr. Foster said, he was satisfied that it was not a good plan to plow and cultivate the

land in orchards. Plowing wounded the trees, broke off the roots, and produced disease.—It was best to select a spot for the orchard, which the farmer would never want to plow. He recollected a case which confirmed his theory. He was called upon, by a farmer, to graft his orchards. The orchard where the grafting was to be done had been prepared with great care, plowed often, and the trees pruned closely. By its side stood another orchard in a pasture. When he went into the orchard for the purpose of grafting, the trees he found were much diseased. He thought he would examine the trees in the pasture, as they were planted at the same time, in like soil, and the only difference in their management was that while the trees in the enclosed orchard had been pruned closely and plowed among, those in the pasture had been left to grow pretty much as they would. The trees in the pasture he found sound,—the wood white clear through. He was satisfied that plowing, breaking the roots as it must in every direction, was bad treatment for the orchard.

Mr. Boothbay, of Saco, would subscribe to the doctrine that plowing in an orchard was detrimental to the trees. It was his experience. He had several trees in a pasture, situated near a spring where the stock went to water. In the summer, the stock would go to the spring for water, and, having slacked their thirst, would lie down under the trees, and stamp around them, keeping the ground porous. These trees had flourished finely and bore well, while he could not say so much for his trees situated elsewhere.

The Chairman, Col. Smart of Troy, said that he had been as it were, reared in an orchard; he concured with his friend Foster, somewhat, in his ideas respecting plowing an orchard. A brother of his had taken three crops of wheat from his orchard, and he was aware that the trees had suffered materially in consequence, and that injudicious tilling had caused it to decline. Several years ago, his son took a considerable quantity of muck from a low spot where flags grew, and carted it into the orchard, and spread it among the trees, and he thought the process increased the yield of the trees very much.

GRAFTING.

In grafting, it was always best to put the grafts in at some distance along the limb to be grafted—sometimes several feet—and thus extend the top. For grafts were not so liable to be broken by the wind the second season, as if put nearer the main trunk. The wind moved the whole limb instead of the graft. The scion seemed to grow better by placing it out several feet than when put close to the body. The farther you got from the trunk, the greater the force seemed to be, or the better the circulation of the sap necessary to sustain the scion.

Mr. Boothrby said a friend of his, who had good success in making trees live, practised digging holes three feet deep to receive the trees: then filling the holes up to a proper depth and setting the trees, this made the soil mellow, and gave the roots a chance to penetrate.

Mr. Foster said he thought this would be too deep. It would cause the roots to shoot down too low to receive the warmth of the sun."

To Prevent a Cow Failing in her Milk.—Wash the cows udder and teats with pure cold water before milking, and then milk her morning and evening as dry as possible; negligence in this latter precaution is one of the causes of cows failing in their milk. The cow should, if possible, be always milked by the same person, and while the process is going on a small quantity of hay should be placed before the animal. This furnishes employment for the jaws, and draws her attention from what is going on, and the milk is in consequence yielded freely.

[American Veterinary Jour.

Facts about Milk.

"Cream cannot rise through a great depth of milk. If, therefore, milk is desired to retain its cream for a time, it should be put into a deep narrow dish; and if it be desired to free it most completely of cream, it should be poured into a broad flat dish, not exceeding an inch in depth. The evolution of cream is facilitated by a rise, and retarded by a depression of temperature, At the usual temperature of the dairy, 60 degrees F., all the cream will probably rise in thirty-six hours, but at 70 degrees, it will perhaps rise in half that time; and when the milk is kept near the freezing point, the cream will rise very slowly, because it becomes solidified. In wet and cold weather the milk is less rich than in dry and warm; though not in thundery weather. The season has its effects. The milk, in spring, is supposed to be best for drinking, and hence it would be best for calves; in summer it is suited for cheese; and in autumn—butter keeping better than that of summer—the cows less frequently milked, give richer milk, and cosnequently more butter. The morning's milk is richer than the evening's. The last drawn milk of each milking, is at all times and seasons richer than the first drawn, which is the poorest."

A Remedy for Colic in Horses.

I have intended for some time to request the re-publication of "A Remedy for Colic in Horses," which appeared in the Southern Planter, Vol. III, page 47.

I have used the medicine with entire success for seven years, in several of the severest cases I ever saw. I had lost two of the best horses I owned previous to this publication.—But since I have practiced this way I have never, so far, had a horse remain sick thirty minutes after giving the drench.

By this way, I would advise every man who has a sick horse to give this medicine, although he may be told by others that his horse has "the grubs," for the symptoms in both cases are alike, I said the symptoms in both cases are alike, but I must make a reserve, for I believe in ninety-nine cases out of a hundred that are said to be grubs, the horses die by colic—and grubs being found in them the cases are then decided to be grubs.

Here is the recipe:

"Take two quarts of cold water in a hand basin, add with your fire shovel, say a pint of hot wood ashes or embers, and stir. Cut off an inch and a half from a common handful of tobacco and shred in the mixture. Stir all up and let it stand fifteen minutes and settle.—Pour off a common black bottle full of the fluid, and drench your horse. In half an hour he will be well.

"Rationale: The gas which bloats the horse is probably carbonic acid gas and light carburetted hydrogen, the product of the vegetable decomposition which is going on in the intestines; at any rate, it is a gas which is immediately absorbed by its combination with an alkali.

"The tobacco is a powerful anti-spasmodic and cathartic; it, therefore, prostrates the nervous sensibility, checks the inflamation, and increases the action of the lower intestines. In a critical or extreme case it will be well to give an enema of a strong decoction of tobacco with a common syringe. Out of more than one hundred instances in which I have seen this remedy used, I have yet to witness the first fiailure. It also has an advantage over very many remedies, viz.: it cannot injure a horse in perfect health. Feed light for a day or two.

"Causes of Colic.—The main cause consists in the presence of a greater amount of food than the intestines can elaborate into nourishment, or of a kind of food difficult of digestion, producing spasms, obstruction, vegetable decomposition and consequent inflammation. *Hard driving on a full stomach* will produce colic, because the effort weakens the tone of the digestive powers and they cannot elaborate the food—which then produces irritation and inflammation. *Cold water when the horse is heated*, because it is a powerful stimulus, and will produce spasm or obstruction, or by the re-action produc weakness of the digestive organs. It also increases the fermentation. *Hearty feeding after hard driving*, because the stomach and intestines sympathize with the general fatigue of the system, and are easily overloaded, and the appetite will induce the horse to eat more than he can digest.

"Colic is first flatulent, then inflammatory. In the flatulent stage, or in what is called bellyache, aromatic remedies or half a gill of spirits of turpentine, or a pint of whiskey and black pepper may be given. All these stimulate the system, and may assist in overcoming the difficulty. But in the latter and inflammatory stage, which rapidly succeeds the former, these same remedies would produce speedy death by increasing the inflammation. In nine cases out of ten this disease is not observed by the ordinary driver until it has assumed the inflammatory form—in which stage the remedy at the head of this article should be given with as little delay as possible; although it should not be omitted, even if the horse be supposed to be in the article of death itself, for I have seen them recover when every by-stander had dismissed all hope.

[Cor. Southern Planter.

The Black Wart on Plum Trees.

Our friend Rufus Bacon, Esq., Editor of the *Vigilant*, had promised us an article upon this subject, based upon his observation and experience; but a correspondent having called him out upon the subject in his own paper, we copy from his remarks in the hope that from the experience of so many cultivators something valuable will be brought to light. He says:—N. Y. Farmer.

"This is no new evil; we recolect seeing an article from the pen of the Rev. Dr. Harris, of Mass., more than thirty years ago upon this subject, and if our memory serves us right, he was at a loss to decide whether the excrescence was caused by some specific disease of the tree or by an insect.

The only remedy he proposed was by cutting off the diseased limbs in August, and burning them, that if the disease was caused by an insect, their eggs would be destroyed, and their further increase be prevented.

In following the directions of Dr. H., we soon observed that our labor would be fruitless, if the disease was caused by an insect,

and the remedy was the destruction of the egg or larvæ of the insect.

In cutting into the excrescence or wart, we noticed that the substance in most cases was entirely dry, and nothing remained but a dry powder, showing that an insect had once been there, and had avoided the trial by fire which the Dr. had prepared for him.

We found several, however, with the living worm within it, one of which we endeavored to keep under a glass vase, to watch its development—but some of the family in their periodical cleaning-up, threw away the unsightly object, and left us as much in the dark as ever.

This year we have had no better success—our experiment has again been interfered with, but we have added somewhat to our stock of observations on the subject.

We have seldom opened an excrescence without finding one or more worms in progress of developement, from one line, to a quarter of an inch in length, which appears to be the largest size to which the worm attains while in the wart on the tree, when it is of a whitish brown color with a chestnut colored head somewhat stouter than the worm produced by the curculio in the plum.

We have noticed likewise that the insect does not attack the wild sour plum, and some varieties of the cultivated plum, and that in light sand or gravelly soils, the disease or insect is much more deadly than in heavy soils of a clayey texture.

The English cherry, black or white heart, does not throw out warts when planted among the red or sour cherries, but the skin on being punctured by the insect becomes black for an inch or more on the side of the limb or twig attached, and if the twig is small the whole of it dies.

We hope these remarks will call the attention of some naturalist, who has a conservatory, where he can watch the development of the insect to its full maturity, and publish the result for the benefit of the world.

A Problem solved.—Much wonder has frequently been expressed why people who eat the most should seldom become portly.—The following scientific article accounts satisfactorily for the fact: "Baron Leibig's discovery in animal physiology that the excessive labor of the jaws, in the mastication of food, wasted the beast's muscles, and retarded his progress, has been fully confirmed by practice; and instead of feeding, as formerly, upon hay or whole turnips thrown to them, our stock have their food 'minced' for them by different descriptions of cutting machines.—Such is the advantage obtained by this mode of feeding, that lambs fed with the aid of a turnip cutter are worth more, at the end of a winter, by 8s. per head, than lambs fed upon whole turnips, the cost of using the machine being but 1s., and the cost of the machine itself not more than £5; thus effecting a saving of 70s. an acre upon the turnip crop."

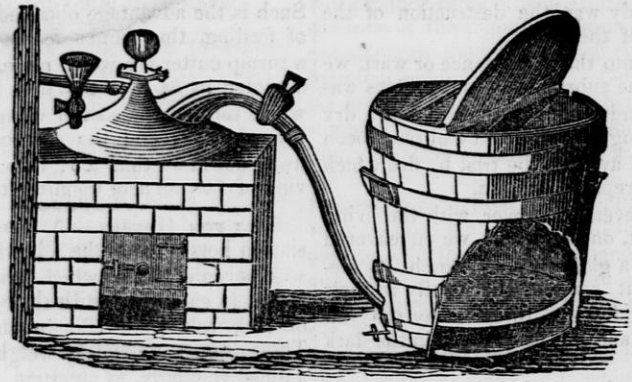
Salt for Horses.—A person who kept sixteen horses made the following experiment with seven of them which had been accustomed to eating salt with their feed. Lumps of rock salt were laid in the mangers.—These lumps previously weighed, were examined regularly, to ascertain what quantity weekly had been consumed, and it was repeatedly found that, whenever these horses were fed on hay and corn, they consumed only two and a half or three ounces per day, and when they were fed with new hay they took six ounces per day. This fact should convince us of the expediency of permitting our cattle the free use of salt at all times; and it cannot be given in so convenient a form as rock salt, it being much more palatable than the other in a refined state, and by far cheaper. A good lump should always be kept in a box by the side of the animal without fear that it will ever be taken to excess. [Boston Cultivator.

Guano—*Its analysis and value.*—We have before us the results of analysis of Outer Lobos Guano, recently made in London, as follows:

Salt of Ammonia - - -	7½	parts
Animal organic matter - -	8½	do
Sulphare Muriate Potash and Soda	2½	do
Phosphate of Lime and of Magnesia	52	do
Sand - - - - - -	18	do
Water moisture - - -	11½	do

The great Chemist, Leibig says that 1 lb. of Guano imported into a country, is equal in value to eight pounds of wheat, or twelve and a half cents. It was stated a few days since that ten tons, was worth to the farmer $600 net profit. Liebig's calculation would make it worth a much larger sum; and instead of furnishing a family of ten with bread six years, it would do so for twenty-five years. [Ex.

Mining and Agriculture.—It is generally supposed that these two pursuits cannot flourish together. Such is not the case.—Humbolt describes the neighborhood of the Guanaset mines, in Mexico, as reminding him of the fruitful plains of Lombardy; and in Chili, the rivers which wash down gold, are described as flowing through the richest corn fields.



Steamer.—Cooking Food for Stock.

The following remarks in reference to the plan of the steamer above represented, and cooking for stock generally,—an important and, just now, seasonable matter,—are from the American Agriculturist:

"If food is to be cooked, on a small scale, boiling may be cheapest; if on a large scale, steaming is not only the cheapest, but infinitely more compact; for the former would require a very large, or several furnaces, for different sets of kettles, whereas, the latter may be done with one small furnace, steamer, and pipe, as shown in the cut, with any reasonable number of vats or tubes surrounding, in which to steam food. In order to do this, the steam pipe must be made moveable, with a screw, flexible, or be composed of some material that when the food is cooked in one tub, the pipe can be turned and inserted into another. We have seen no less than five tubs, holding 150 gallons each, surrounding a small steamer, all of which could be filled with food and cooked within twenty-four hours. Three tubs, however, are usually sufficient for a large stock, in which the food of the first may be cooking, that in the second cooling, while that in the third is being fed out. A single person may be able to oversee and efficiently manage all these operations.

The furnace, steamer, and tub, are so plainly delineated in the above cut, that they need no explanation. In cooking potatoes and other roots, the tub should have a false bottom (as represented,) perforated with numerous small holes, and set resting on blocks from three to four inches above the true bottom. The steam-pipe should enter the tub nearest the bottom. The steam is thus introduced between the two bottoms, quickly rises upward, and is evenly diffused through the whole food. While the cooking process is going on, the top of the tub should be kept down as tight as may be possible, so as to prevent the escape of any steam. In cooking grain or meal the false bottom must be taken out and the tub filled with water, as the steam heats the water and brings it to a boiling point as readily as a blaze or hot coals around a kettle.

Steaming is said to do its work more thoroughly than boiling, as it is so insinuating, it easily enters and bursts all the minute globules in the grain and vegetables. Be that as it may, certain it is, that either process renders the food more digestible, and easier assimilated by the absorbing vessels, and therefore more economical."

Guano and its Application.

GUANO should never be applied as a top-dressing, even if followed by the harrow, except to clayey soils, whose retentive and absorbent powers would have a tendency to prevent the immediate evaporation of the ammoniacal gases. It is recommended by the American Farmer, that this manure be immediately mixed with plaster, at the rate of a peck to every one hundred pounds of guano, and then packed in tight hogsheads or casks until it is used. A bushel of powdered charcoal answers the same end as a peck of plaster. One bushel of powdered clay and half a bushel of salt, where charcoal or plaster are not to be had, will have nearly the same effect. Unless the volatile gases are thus fixed, a constant waste will occur of the most valuable constituents of this fertilizer. The same authority adds, that "guano, if properly managed, is a cheap and efficient manure, *four hundred pounds* of it, per acre, being sufficient to sustain the crops

for an entire rotation; but if used without the care necessary to impart to it the power of retaining its ammoniacal salts, its greatest power will be expended in the first crop."—This power is given by mixing it with the absorbents before mentioned, and by plowing it in immediately on applying it to the soil.

When guano is applied to the surface or only harrowed in, the action of the earth and atmosphere tend to liberate the ammonia faster than it can be used by the plants or absorbed by the soil; hence the necessity of turning it under to the full depth of the furrow, that its nutritive properties may be fully retained, to be given out only at the demand of the various crops, which may be sown or planted. These are sure to find nutrition, if the soil contains it.

Lime, especially that freshly slacked, should never be applied to the soil at the same time, or allowed in any way to come in contact with guano. Its tendency is to drive off the ammonia already formed, and to decompose and volatilize all the essential nutritive elements of this manure. It may be applied some time before or after guano, without injurious effect, especially if charcoal or plaster have been used with the guano. The action of this manure is much less permanent on light sandy soils, unless they are rich in mould, than on clays and clay loams. The latter seems to possess a power of retention of manure which is wholly lacking in the former. This is readily explained by a consideration of the nature of the two soils—the one, light, open, readily pervious to air and moisture; and the other, heavy, active in absorbing, and slow in giving out the manureal elements which may be applied to it.

[Exchange.

Floor for Foundered Horses.

It is, doubtless, a well known fact, to many of your readers, that a foundered horse cannot be effectually cured, unless taken in hand immediately; and that in many instances, foundered horses continue to grow stiff and lame, as they increase in years. We do not deny that inveterate cases of founder *may be cured*, but the instances are few where a horse is as effectually cured after having been foundered for a number of years.

Foundered horses, could they but speak, would say that they suffered *extremely*, from the intense pain in the legs and feet; and any one may satisfy himself of this fact, by watching their uneasiness while standing still—their incessant stepping—taking up the fore feet constantly, and feeling, as it were, with them, for an easy place to stand. This constant pain operates not unlike the tooth ache in the human family. By it the rest is broken, and the health greatly impaired.

But, if the founder cannot be cured, the condition of a foundered horse may be much ameliorated. I have a foundered horse, and many times it seemed almost impossible for her to get out of the stable. The elasticity of her legs was gone, and it was "miseration" to see her walk. I put her on a floor of earth—but found it was too cold and wet for her health. I then laid a floor of plank directly on the ground, leaving an opening for the fore feet, about six inches wide, and eighteen long. During most of the time she would stand in this opening. As the floor was laid on a calcareous, retentive subsoil, she soon made mud in this hole. In a short time her legs began to assume their wonted elasticity, and many times no appearance of founder could be discovered.

The object in having a plank floor with a hole in it, as described, is twofold. One is, the horse may have all the benefit of a floor of earth, and yet not be in danger of being exposed too much to a wet and cold stall.—Another is, it is a great relief, after standing in this mud a sufficient length of time, to stand on the floor; and when they lie down their bed is dry.

If those who are so unfortunate as to have foundered horses, will construct this kind of floor, they will soon discover a great improvement in the traveling of their horses, and also in their health and fleshy condition.

[Cor. Albany Cultivator.

"Do not Waste.—*If you desire to become an influential man, save your time—If you do not, you will always be a drone.*—What, is there a man who cannot save and improve? By curbing appetite and restraining passion, by observing prudence and maintaining regularity, he may save his health, as constant fountains of energy and happiness, to sustain and cherish him under every labor and every hardship. He may save a fortune by industry and denying himself needless indulgences, and he may find a pure enjoyment, in devoting it to noble uses. One of the hours of each day wasted on trifles or indulgence, saved and daily devoted to improvement is enough to make an ignorant man wise in ten years—to provide the luxury of intelligence to a mind torpid from lack of thought—to brighten up and strengthen faculties perishing with rust—to make life a fruitful field, and death a harvest of glorious deeds."

EDUCATIONAL.

CONDUCTED BY J. L. ENOS.

For the Wisconsin & Iowa Farmer,

The Winter Schools:

SHALL THEY NOT BE BETTER THAN THE STATE HAS EVER KNOWN?

I hear the response, "They shall be."—This noble answer comes from hundreds of generous and devoted spirits, awakening to their high and sacred responsibilities; from teachers, who are leading on measures of reform with patience that no apathy can weary and with a devotion that no obstruction can long resist; from the institutes assembled for mutual improvement and from conventions of friends of the greatest cause of earth. All with one united voice—giving their spirit to the age answer with one glorious affirmative response.

But it is not enough to *resolve*, we must *do:* do what is seemingly of small consequence, and yet these duties are the source of those influences which sustain and renovate society.

What are some of these duties?

1st. Parents should listen to the plans of teachers and give them their confidence and sympathy; should require of them a faithful account of their children; should supply them with the necessary books; should frequently visit the school; should be slow to find fault with its government, remembering how difficult they find it to rule their small families, and should insist upon the regular *attendance* of their children.

The importance of this last duty can hardly be overrated. Ask the devoted teacher, what disorders his school, clogs all improvement, chills his hopes and disgusts him with his avocation. The *irregular attendance*, will be the answer. For neither system, nor general improvement is practicable, where the school is composed of different pupils every successive day. Would a carpenter or a blacksmith, or a farmer, undertake to teach a boy to follow either business, if he could not have him regularly and constantly under his care?—And has not a teacher a more difficult task? one requiring more assiduity in the pupil and more fidelity in the master?

In our private schools the absences do not generally exceed 7 per cent., in the public they often reach 40 per cent.

Let there be an end of this folly, and if we cannot send our children but one month this winter, let it be thirty successive days.—For more will be learned in thirty days of regular attendance than in three months of occasional calls at the school-house.

But this is a subject for an extended chapter, instead of a paragraph, and we must notice other duties which are essential to good winter schools.

District officers have their duties to perform, and they are both important and vexatious.

The school house must be repaired—there is glazing to be done, benches to be cut down for they are almost always too high, stoves to be put up and wood to be furnished. About two hours out of the six school hours of the day, are lost, in many of our schools, from the want of suitable wood, and the exercises are consequently so hurried during the residue of the time, that but little can be accomplished. The good teacher bears up but a short time against these difficulties, but human nature cannot long resist them, and all interest in his duties is gradually frozen out of him. The public money surely had better be saved and the school house closed, rather than be made a purgatory to both teacher and pupil. The board should also remember, that it is their peculiar duty to counsel and sustain the teacher amidst his various trials, and not leave him, a stranger perhaps, to the desolate feeling, that he is regarded on all hands as a necessary evil, next only to the tax gatherer in annoyance.

The teachers have their duties, more important and more dificult than all others, and if well done, exerting an influence that man can not well estimate, that time does not limit. And the first great duty of the teacher is to realize the sacred nature of his high vocation. That he is to unfold those powers, to form those habits, to purify and strengthen those sentiments, which in their harmonious development, make that noblest work of God

—a TRUE MAN. And if from negligence or ignorance he perverts his noble office; if he stills the small voice of conscience, or inflames the passions, or stupefies the intelect, or breaks the spirits of the being that is forming under his influence, he does a wrong to his fellow creature, of infinitely deeper malignity, than the highwayman or the incendiary can perpetuate.

But if he earnestly, seriously, ardently devote himself to this glorious work, if he habitually cherish a deep sense of his responsibility to man and to God, if he measure his profession not by the false judgment of prejudice or ignorance, but by the standard of truth, and determine not merely to seem, but *to be* the teacher of the young, then no man has a nobler sphere of action, or a higher and happier duty.

FIRST TEACHERS INSTITUTE IN WISCONSIN.—The question has been raised, of late, where and when the first Teachers' Institue was held in Wisconsin.

By reference to Vol. 1st of the *Wisconsin Farmer*, page 114 it will be found that the first institute in the State was held at Lake Mills, in Jefferson County, in charge of J. L. ENOS, aided by Messrs. ROOT, MUNN and MIXER.

Salt for fixing Ammonia in Manure.

"It is well known that in a close stable, where there are many horses, there is a very pungent smell, affecting the eyes and nose. particularly when the stable is being cleansed out. This smell is occasioned by the flying off of ammonia, which is the essence and value of manure, and which volatizes or flies off at a very low temperature; even the warmth of the manure in a stable will send it off in great quantities by the common heat of manure in a farm-yard, whether thrown up in a heaps or not.

A writer in an English journal describes a very cheap and simple remedy for this. Before you begin to clean out your stable, dissolve some common salt in water, if a four-horse stable, say four pounds of salt dissolved in two buckets of water, and poured through the nose of a water-pot over the stable floor an hour or so before you begin to move the manure, and the volatile salts of ammona will become fixed salts from their having united with the muriatic acid of the common salt; and the soda thus liberated from the salt, will quickly absorb carbonic acid, forming carbonate of soda. Thus you will retain with your manure the ammonia which would otherwise have flown away; and you have a new and important agent thus introduced, viz., the carbonate of soda. As this is a most powerful solvent of all vegetable fibers, and seeing manures have to be rendered soluble before they can act upon vegetables, it will be at once apparent that the carbonate of soda so introduced must be a most powerful and valuable agent."

Linseed Meal for Calves.

Almost every person in the habit of feeding cattle for the butcher, is acquainted with the fattening qualities of linseed cake, but rearing calves with linseed meal has been introduced in this neighborhood within the last three or four years (1848;) it is now quite established and a great saving is the result.

Half a pound of this meal is sufficient for a calf daily, and this costs only one half penny, while a quantity of milk, containing the same nutriment, would cost 6d. to 8d. per day; a saving would thus be effected of at least 6d. a day on each calf, which is 3s 6d a week for one calf, and £3 10s a week for twenty calves; and this, for three or four months, amounts to a sum worth saving.

The linseed meal is the cake ground; the best way of using it is to steep, at the rate of ¼ lb. for each feed, in cold water, for twenty-four hours, then to dilute with warm water to the temperature of new milk, a gruel about equal in bulk to the milk usually given. If any milk be added, a pint each feed is quite enough.

The general report of our farmers and dairymen who have continued the use of this meal for rearing calves, during the last ten to fifteen years, is, that the calves are more healthy than when fed on milk, and that there are fewer deaths. It is very nutritive, and at the same time keeps the stomach and intestines in a cool and wholesome condition. No case of what is called *black-leg* has occurred with this feeding, that we are aware of.

[Montreal Agricultural Journal.

A new town has been laid out in Washington county, by Messrs. Perin and Day, on Lake St. Croix, opposite Willowriver. It is said to be a very beautiful site for a town and that it is to be dessignated by the name of Lakeland. [Minnesotian.

DEATH OF A MAN FROM GLANDERS.—Mr. J. P. Burns, a grocer in Baltimore, died a horrid death in that city, a few days ago, in consequence of poison communicated to his system from a horse afflicted with glanders.—During the administration of medicine, Mr. B. thrust into the animal's mouth, his hand, a finger of which, had been previously cut, and the flesh laid open. Through this wound the virus was absorbed, and mortification supervened. A surgeon was called upon to amputate the diseased member. Perceiving, however, that the poison had penetrated to every portion of the unfortunate man's system, he declined performing the operation, and stated that no earthly skill could save his life. After lingering in great agony, death closed the scene. The corpse presented a hideous and blackened appearance.

[Herald of Reform.

New variety of Barley.

MR. EDITOR, Enclosed please find a small sample of a new variety of barley, *without beard*, and the grain *without hull*. It has grown on my place, on the the top of a worn out piney woods hill—so poor, that three years ago, when I took the place, not more than one bushel of corn per acre could be raised. This barley has yielded at the rate of thirty-four bushels per acre, after the ground was manured and subsoiled, and every person that saw it pronounced it decidedly the finest he had ever seen, and a great acquisition to the South. It must be sown very thin, as it grows bushy, and produces a great many leaves and stalks, which makes it particularly adapted for feeding cattle with, in a green state.

Cor. Soil of the South.

TEA PLANT.—Dr. J. Smith writes from Greenville, South Carolina, that he has received a fresh supply of tea-nuts from China, and expresses high satisfaction at the result of his experiments in the culture of tea in the United States.

GREAT YIELD.—Mr, William Shaw, of Foxcroft, has raised the past season one hundred and twenty-six bushels of good sound wheat from six bushels sowing. The wheat is of the "White Bald" variety, as he calls it. He has left a sample at our office of one bushel and a half, which weighs 88½ pounds. There will be no need of going to New York to mill another year if our farmers will but pay attention to the culture of winter wheat. We doubt whether so large a yield from so little sowing can be produced in this county. [Piscataquis Maine Observer.

Onion Maggot.

A correspondent of the N. E. Farmer says: "I noticed a short piece in your paper of the 13th ult., written by Ira Brown, requesting to know if there had been any effectual remedy discovered to kill the onion maggot. I would just say that if you make a strong decoction of tobacco, and sprinkle your onions once a week, the maggot will not trouble them, for it is a flyblow which the fly deposits on the top, snug to the growing onion; the tobacco prevents the fly from blowing the top. I saw it tried last season with success, only applied three times."

ARTIFICIAL COAL.—In the French Academy of Sciences, some interesting experiments have been made in producing mineral coal by an artificial process, which it is expected will throw much light on the subject of geology. Wood is put into an iron or glass cylinder, and closed against any escape of air, and applied to a heat of 600°. The result has been, that the wood was melted and reduced to mineral coal. Old wood of dry fibre produced dry coal; but young wood, or that which was put in wet produced a glutinous coal.

[Scientific Am.

INSTINCT OF THE TURTLE.—It has been observed that turtles cross the ocean from the Bay of Honduras to the Cayman Isles, near Jamaica, a distance of 450 miles, with an accuracy superior to the chart and compass of human skill; for it is affirmed that vessels which have lost their latitude in hazy weather, have steered entirely by the nose of the turtle in swimming. The object of their voyage, as of the migration of birds, is for the purpose of laying eggs on a spot peculiarly favorable.]Bishop Stanley on Birds.

NOT DRUNK!—Dr. Franklin, in speaking of the intemperate drinker, says, he will never, or seldom, allow that he is drunk; he may be "boozey, cozey, fox'd, merry, mellow, fuddled, groatable, confoundedly cut; may see two moons; be among the Philistines; in a very good humor; have been in the sun; is a little feverish; pretty well entered, &c., but *never drunk.*"

EMPLOYMENT OF WOMEN AND CHILDREN.—The legislature of Ohio have passed a law restricting the employment of children under eighteen, and all women in the mechanical or manufacturing establishments more than ten hours in a day.

EDITOR'S TABLE.

Death of Prof. Norton.

In the September Number of the Farmer, we were called upon to announce the death of A. J. Downing, who was the most prominent Horticultural writer of the day, and who stood at the head of his profession. But, little did we then expect, that the painful duty would so soon devolve upon us, of recording the death of another, no less distinguished, as a Scientific Agricultural writer.

John P. Norton, Prof. of Chemistry as applied to Agriculture, in Yale College, died Sept. 5th, aged 30 years. In the death of Prof. Norton, Agriculture as a Science, has suffered an irreparable loss. He had no superior in his profession, nor as a writer on Scientific Agricultnre. In the year 1846, Prof. Norton, while a student in one of the principal chemical labratories of Scotland and in competition with some of the most learned chemists, received a premium of $250 from the Highland Agricultural Society, forthe best analysis of the oat. In 1850, the New York State Agricultural Society awarded o him, a premium of $100, for the best Essay, written on Scientific Agriculture. This Essay has since been published as a text book for schools—has been widely circulated, and is very popular. He subsequently wrote an appendix to Stephens' Book of the Farm a British Work on agriculture of some 1400 pages and re-published in this Country. His addresses before Agricultural Societies—Lectures, and contributions to the Albany Cultivator, and other agricultural papers were numerous. His health failed while delivering a course of lectures in Albany last winter.

The Cultivator, in closing an obituary notice of Prof. Norton, very feelingly remarks: "The severe labor, attendant on delivering courses of lectures at New Haven and at the University of Albany, materially impaired his health, and before the close of his lectures, he was obliged to leave for a warmer climate. Strong hopes were entertained, at first, of his recovery, but Providence had otherwise ordered. After his return to the north, he sank slowly to his end. Though conscious that he must leave a world which was just opening to his ambition, and a circle of friends who fully appreciated his worth, he was cheered on by that christian hope which had been his guide and solace during life. The exchange of worlds is for him a happy one, but his loss will cast a shadow on many a heart.

Nurseries.—We understand, from Dr. Kennicott, that Mr. B. Cheney of Roscoe, Ill., three miles from Beloit—has purchased the interest of Col. Hodge, in The Grove Nursery. Mr. Cheney will get from 20, 000 to 30, 000 large trees,—most of saleable sizes, and many extra large.

Mr. Cheney intends to commence removing his purchase to his place this autumn, and commence selling at once. Though a good chance for the people of that region to obtain fruit trees, of Mr. Cheney, is thus offered, the stock at The Grove Nursery will still remain too large for the demand—for in addition to the half of the old, Dr. Kennicott has a lsrge accumulation of new, in which Col. Hodge was not interested.

Sheep For Sale.

Mr. C. H. Smedley of Geneva, Walworth Co. has just puschased, from some of the best flocks in Vermont, between 200 and 300, full and half blood Spanish Merinos, (Bucks and Ewes) which he offers to those who wish to purchase, on fair terms. Here is a good opportunity for those who wish to make a beginning, and for those already in the business to improve their flocks. Mr. S., has annually, for some years past, brought into this State from Vermont, a flock of the same kind, and knows well how to select for this market. We would advise those in want of this class of sheep, to give Mr. Smedley a call.

The Journal of the United States Agricultural Society.

We have received the first No, of this valuable work, published in Washington, under the supervision of Dr. Daniel Lee, the Corresponding Secretary, and at the expense of the Society.

The objects of this Journal, as gathered from the introduction, are to make an accurate record of all the important proceedings of the Society, and to furnish such information as will be most useful to the farmers and gardiners of the United States. All persons who become members of the Society, are entitled to a copy, without any other charge than postage. The payment of $2, annually, constitutes a person a member. It is the design of the Society, to give to each member, a full equivalent, in books and seeds, for the amount he may pay into its treasury.

This Journal is to be published quarterly, and each number is designed to contain, from 150 to 200 pages. The number before us, contains the preliminary steps which led to the organization—full proceedings of the Convention—Constitution and names of officers—analysis of soils and grains—agricultural statistics—experiments in draining, and a large amount of other highly useful matter relating to agricultural pursuits.

The Northwestern Horticultural Convention, which met at Dixon, Ill., the 29th, Sept., was a grand affair. The next meeting of the society, will be held at Chicago next autumn. Want of space excludes any farther notice this month.

POULTRY.—John T. Andrew, West Cornwall Co., writes that he has experimented much in the varieties of poultry, and thinks he understands all the ropes in the ship. We should be inclined to think it might be so, when he states that "I sold last year, chickens enough to clear *thirty dollars on each of all the hens I kept.* [Granite Far.

THE END OF EARTHLY GLORY.—Buonaparte's house at Longwood, St. Helena, is now a barn—the room he died in is a stable—and where the imperial corpse lay in state, may be found a machine for grinding corn. Buonaparte often remarked that from the sublime to the ridiculous was but a step."

THE SOAP PLANT.—The soap plant grows all over California. The leaves make their appearance about the middle of November, or about 6 weeks after the rainy season has set in; the plants never grow more than a foot high, and the leaves and stalk drop entirely off in May, though the bulbs remain in the ground all summer without decaying. It is used to wash with in all parts of the country, and by those who know its virtues, it is preferred to the best of soap. The method of using it is merely to strip off the husk, dip the clothes into the water, rub the buld on them. It makes a thick lather, and smells not unlike soap. The botanical name of the plant is Phalanguim Pomaridianum. Besides this plant, the bark of a tree is also used in South America, for the purpose of washing. Several other plants have been used in different countries as a substitute for soap. [Am. Union.

All the villages throughout the mining country are undergoing repairs. An appearance of briskness indicates that the years of repose have ended, and that a new and vigorous period is setting in. Freedom from California excitements and the general impression of good times, may account for the change. [Grant Co. Herald.

What is going on throughout the mines, as to improvement we are unable to say. But this we do know; Shullsburgh and Wiota present a thriving appearance, as quite a number of new buildings are being erected, and much repair has been put upon the old ones, in those places. May they continue to prosper. [Monroe Sentinel.

NEW SALT LAKE.—We learn from the St. Anthony Express, that a salt lake has been discovered in the Minnesota Territory, between the 47 and 49 degrees of north latitude—that the waters are very strongly impregnated with salt, and that the shore of the lake is surrounded with a large and deep incrustation of salt, resembling in appearance a large snow bank around the margin of the lake.

There is a great mortality among cattle in the neighborhood of Memphis, Tenn. The disease is murrain. One man lost over forty out of seventy head.

A JAR MATRIMONIAL—A MAD WOMAN.—Emily M. Bennette, whose worser half posted her in the newspapers and then ran away with another woman, contrary to the statute in such case made and provided, comes out in the Woonsocket (Mass.) Patriot after this wise. "As no one would have trusted him for as much as a peck of meal, I therefore forbid any person or persons trusting him on my account, as I shall pay no debts of his contracting after this date. I have worked to support him in gambling and laziness as long as I mean to, although, should he die soon, *I will pay his funeral expenses.*

NEW FEATURE IN BOSTON BUSINESS.—The Boston Courier says that Sixteen cars, loaded with eight sticks of timber for ship's masts, 84 feet in length and three feet in diameter, loaded in Buffalo, were brought over the Buffolo and Rochester, Rochester and Syracuse, Syracuse and Utica, Utica and Schenectady, Rensselaer and Saratoga, Saratoga and Wash., Rutland and Burlington, Chesh., Fitch., Grand Junction to East Boston, and thence over the Eastern Railroad to Portsmouth, N. H., a distance of 628 miles without change of cars.

TERRIBLE SICKNESS IN MAINE.—A Maine paper states, from the books of the agent appointed to sell liquor for medical purposes in that town, that there are 24,000 persons in the immediate vicinity who are *diseased.* Awful!!

COPPER FOUND.—A few weeks ago, Mr. Wm. Pinkham, residing some miles east of Taycheedah, in digging a well, found a lump of copper almost pure, weighing 16 pounds and 12 ounces.—This is the largest lump ever found in this Co. [Fond du Lac Jour.

WHO BUILT IT?—We learn from Dr. Salisbury, Geologist to the state, that within the past three weeks, a surveying party, in Essex County have stumbled upon the remains of a city, which must have once contained 15,000 or 20,000 inhabitants. It is located in the forest, a few miles back of Ticonderoga, and was evidently the home of a people considerably advanced in the arts and comforts of civilization. In proof of this we may mention that the ruins of more than two hundred chimneys are yet in a state of good preservation. As no such city has ever been mentioned by our Historians or Gazetteers, a question arises about its original builders, which will keep our Historical Society in first class wrangling materials for the next five years. The idea that such a city should have existed within a few hour's ride of Albany for centuries and yet never been discovered till July, 1852, is one of those singular facts which excuse astonishment. [N. Y. Dutchman.

FARMING PROPERTY.—We learn that property is rising in value in the south part of this county, on account of the prospects of soon being in proximity with the Railroad. [Grant Co. Her.

Hussey's Reaping Machine, in an experiment recently in Maryland, among a company of farmers, cut twenty-five acres of wheat in a day, requiring twelve binders to keep pace with it. The wheat operated on was about five feet high, and very thick and heavy.

They have now, in New Hampshire, a potato-digging machine, which drawn by horses down the rows, digs the potatoes, separates them from the dirt, and loads them into the cart, while the farmer walks along side, whistling "Hail Columbia!" with his hands in his pockets.

DEATH OF AN OLD PRINTER AND EDITOR.—Chas. Holt, Sen., died in Jersey City, on Friday last, at the residence of his son-in-law, P. C. Dummer, Esq., aged 81 years. Mr. Holt, according to the best of our knowledge, was the oldest printer and editor in the United States.

A weak mind sinks under prosperity as well as under adversity. A strong and deep mind has two highest tides—when the moon is at the full, and when there isn omoon.

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WISCONSIN & IOWA FARMER,

AND

NORTHWESTERN CULTIVATOR.

VOL. IV. JANESVILLE, WIS., DECEMBER, 1852. NO. 12.

For the Wisconsin and Iowa Farmer.

Proceedings of the Teacher's Normal Institute for Eastern Wisconsin.

The fourth session of this Institute commenced in the village of Genesee on the 25th of October 1852, and continued for one week, under the superintendence of Prof. L. I. Root, Principal of Carroll College.

The opening address was delivered on Monday evening, by A. J. Craig Esq., which was listened to by a large class of teachers assembled on the occasion.

Each succeeding session of this Institute demonstrates the utility and importance of such associations, and the number of Teachers in attendance is a gratifying proof, that the benefit to be derived from them, is beginning to be appreciated.

On the last day of the session, the committee on resolutions reported the following, which were unanimously adopted.

Resolved, That it is desirable to encourage professional enthusiasm among common school teachers, and that for this purpose, we recommend the formation of Teachers Associations and the holding of occasional meetings to promote mutual acquaintance, and to discuss subjects of practical interest.

Resolved, That the School-house is an index to the good taste and public spirit of any community, and to the interest they take in their children, and that they ought to see to it, that it does not become a standing libel upon them.

Resolved, That the practice of boarding the teacher from house to house, is unjust; because it often throws upon the more comfortable families of the district, the burden that belongs to all; unwise, because it wastes much of the time which the teacher could spend in preparing for his duties; deprives him of the quiet and comfort of a home, and drives from the business, the men of education and experience, and should therefore be opposed by every friend of the Common Schools.

Resolved, That the thanks of this Institute be tendered to A. J. Craig, Esq., for his able and eloquent address, and to Prof. Root, for the earnestness and interest with which he has discharged his duties as Principal, during the present session.

Resolved, That the proceedings of this Institute be published in the Waukesha Democrat, Milwaukee Free Democrat, and Wisconsin Farmer, and that the other papers of Eastern Wisconsin are requested to copy.

It was also resolved, That the next session of this Institute be held in the village of Waukesha, commencing on the second Monday of April next, and continue for two weeks, and that the Executive Committee be instructed to give at least four weeks public notice of the same.

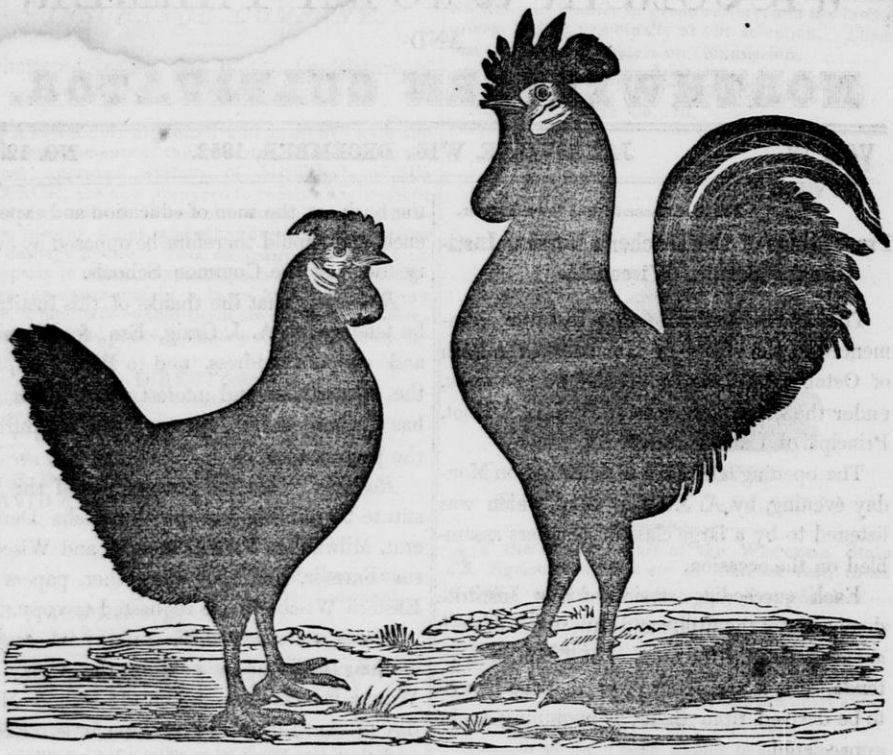
The following persons were elected officers for the ensuing year:—

President, C. W. Camp,
Vice President, L. I. Root,
Secretary, Carroll Lucas,
Treasurer, B. P. Balcom,

C. W. Camp, President.

Carroll Lucas, Sec'y.

Pork.—The Terre Haute, Prairie City, Ia., of Aug. 31st, says:—"We are informed by a merchant of this city who is extensively engaged in the pork packing business, that about fifty thousand hogs have been engaged, up to the present time, by the pork packers of this place. The prevailing price is five dollars per cwt. At this price, an engagement for a lot of hogs was made only last week. The same gentleman estimates that no less than 80,000 hogs will be packed here this winter. Last winter only sixty thousand were packed. The amount of capital necessary to carry on the business in this city the coming winter, will not fall short of one million of dollars!"



PURE BLACK SPANISH, (ELEVEN MONTHS OLD,)

IMPORTED AND RAISED BY JOHN GILES, PROVIDENCE, R. I.

The Southern Cultivator says "the stock represented above, was imported by Mr. GILES, from England; and, judging from the engraving, must be unusually fine."

Blankets for Sheep.

A writer in a late number of the London Agricultural Gazette says, "we find on examining our mortality tables for the last twelve months, that out of 600 Chevoit and black-faced Evehogs, the number of deaths has been but sixteen. Be it remembered also, that with the exception of about a score, none of these ever tasted a turnip, but fared with the ewes on the hill. Since we commenced the use of jackets (small blankets) we have especially noticed an extraordinary diminution of the cases of "sturdy" or water in the head. Hydatids in the the brain are generally understood to be induced by long continued rains, cold winds and general privation. Any one conversant with sheep must have observed the wool along the back, parts in such a way as to fully expose the skin. The connection between the spine and the brain is obvious, and it cannot be wondered that hydatids (little sacks filled with water) should be formed in the brains of sheep much exposed to severe storms without due shelter. Hence the advantage of covering their backs with some material which will protect them in a great measure from the chilling effects of wind and rain. The material used is woolen, the size being 23 inches by 15. We lately purchased some coarse blankets that made excellent covers, each jacket costing four pence. The same were put to the ewes on the 22d of November; and we allow 45 to each male."

The above remarks from a flock-master of large experience in reference to the cause of hydatids, or what we should call water in the brains are interesting in a medical and physiological point of view. We know one breeder in Vermont, who covers the back of each sheep with a half yard of common sheeting, painted to shed rain. The practice is founded in reason, and is likely to extend—literally making cotton, tributary to the production of wool.—The growers of the former staple will not object, if every sheep in the United States and Europe has a cotton "jacket;" for one that will answer every intention can be made cheaper of cotton than of wool. The comfort of domestic animals at the South is sadly neglected. [Southern Cultivator.

For the Wisconsin & Iowa Farmer.

Wheat, Clover and Oats.

FRIEND MILLER:—I noticed an article in some paper a few days since, recommending the sowing of oats with fall wheat, which struck me as a good means of preventing the injuries to which fall wheat is exposed in this region. But I am induced to think that it is not the best means that can be adopted here.

I believe clover sown in the fall with the wheat, will answer every purpose for which oats are recommended. And further, it would prevent much of the injuries to which fall wheat is exposed during the winter and in the spring, which oats will not do. Oats are destroyed by the frost and therefore cannot counteract the effect of the frost in the ground, and prevent its heaving the wheat out; nor can it prevent the dry winds of the winter and spring from blowing the soil from the roots of the wheat, as clover would do. The surface soil in this State is very light, and when the ground is dry and cracked—which is apt to be the case in this State—the wind has a tremendous action on the soil and carries away from the stools of the wheat the best part of the soil—especially upon prairie lands and openings, and the roots are left exposed to weather as well as stripped of nourishment. Clover sowed with wheat would, in a great measure, prevent this; because it would cover and protect the roots of the wheat if stripped of the soil, while they could recover a new hold upon the earth by sending out new roots. And when the dry season comes on, the clover will tend to keep the earth moist beneath it, whereby, the wheat will be less injured by drouth.

Clover sends its roots deep into the earth and draws its principal nourishment from the sub-soil. Wheat requires a light, well pulverized soil to grow in. In dry weather a constant evaporation is going on from the ground, and when the surface is covered by herbage that is near it, this evaporation is retarded, condensed, and retained by the herbage, as well as the rays of the sun are by it prevented from acting upon the earth to a considerable extent. Young clover will have this effect upon the ground—retarding evaporation and retaining moisture, by which the roots of the wheat are protected from much of the evil effects of the protracted drouths of the country.

When the wheat crop is removed, the farmer has a fine crop of feed for his stock, or a good lay to turn under, to enrich his land which, more than compensates for his seed. And if he desires to stock his fields down, he is more likely to do it well by sowing the seed in the fall than in the spring. By sowing the seed in the fall, he follows nature. He sows in the fall in season for it to take root so as to withstand the dry weather of the succeeding summer; whereas, when it is sowed in the spring, it is often killed out by drouth, so that he loses his seed and his labor. Some object to sowing grass seed in the fall, because it will grow so as to embarrass the grain; but I believe in this country, there is little danger of this,—the seasons generally, being dryer here than at the east, the clover will be retarded in its growth, and the wheat will not be injured by it here as at the east. If you deem these suggestions of any service, you can put them into such form as you please, and communicate them to the public through your valuable paper. M. B. B.

Racine, Wis. Oct., 25th, 1852.

For the Wisconsin & Iowa Farmer.

Fond du Lac, Wis., Oct., 1852.

Smoking and Preserving Hams.

Mr. MILLER.—I will give a brief sketch of my mode of smoking hams, and preserving them through the the summer in a fine state, free from flies, mice, dirt, and every other besetment to which they are exposed; and of which so many seriously complain, and have so long sought a remedy in vain. I use the taper tub,(for I pack in no other) 2½ feet high, 20 inch bottom, 16 inch top, makes a very fair size. Some five days previous to killing my hogs, I take an iron kettle that will hold about a pail ful—fill it one third full of live hard wood coals, upon which I lay clean cobs filling another third,—set them in the open air a few moments, until they are near blazing—then turn the tub bottom end up over the kettle, and make it tight on the ground around the top, with dry dirt, ashes, or snow;

so as to prevent the smoke from escaping. The tub will immediately fill, and the smouldering state of the cobs will keep it so for a long time. Two or three smokes a day, for four or five days, will be amply sufficient.—I cut the shank from my hams a little shorter than the usual custom is, and take all the bone therefrom. The main bone lies almost wholly on the front side, and by drawing the knife on that side to the bone—then slipping it on either side, it can readily be taken out, and the ham folded together in its natural shape; which salted and cooled, will remain so, and can be cut through and through without interruption.

The great secret of so much ham being injured more or less, is in consequence of the marrow contained within the bone; and whenever the meat is injured at all—that injury commences at the bone. Pack your hams in the smoked tub, in a manner agreeable to your taste, and keep it covered tight; and I will guarantee, that they will be smoked sufficiently, and if kept covered with a pickle sufficiently strong—they will remain sweet the year round; and can be resorted to at pleasure—the same as the common pork barrel.

Brother Farmers, try it, and keep your wives from scolding about dull knives and yourselves from frowning about tainted ham.

S. N. HAWES.

For the Wisconsin & Iowa Farmer,

Sheboygan Falls, Oct., 1852

Hungarian Wheat, Poland Oats, Coffee Beans and Potatoes.

FRIEND MILLER:—Since your notice of the *Hungarian Wheat*, which I sent you, there has been one steady rush of letters for samples; and I have sent off in letters, I should think at least, one peck, and received in return a great number of specimens—none of which compare with the Hungarian. I have also received many other valuable seeds in exchange, and among them, some *Poland Oats*, which I divide with you. The most obvious feature seems to be their *weight*, as they readily sink, while common oats float. About the time I wrote you last, I changed my mind as to sowing all Hungarian, and obtained from Mr. JOHN NEAL, of Butler County, Pa., a quantity of another new variety—the *Chilian Flint*, from the far famed wheat land of Chili, South America. The berry is not quite as large as the Hungarian, but it is without exception the *brightest* wheat that I have ever seen, and bids fair to rival, if not excel the Hungarian. It is the pure bald, and is said to surpass all varieties in the three great qualities of wheat—weight, earliness, and hardihood. I have sown eleven acres of it, and a handsomer field of wheat I have never seen at this season of the year. I have saved a few quarts of my seed, which I am sending with the Hungarian as samples. I have sown six acres of the Hungarian, and have already received requests enough from those who have seen it this year to save seed for them, to consume the whole crop—provided they all take what they have ordered.

I am, and have been, for some months past making much inquiry through the West, to find some *kidney* potatoes, and some of the old fashioned New England Coffee Beans. If you have ever seen these beans, you will need no description—if not, the following may enable you to recognize them. They do not in the least, resemble common beans in their growth; but grow in straight stalks, as large as ones finger, from 18 to 20 inches high, and once in two or three inches, there are large pods growing out from the main stalk—each pod containing some four or five beans as large as moderate sized acorns. The value of this bean is but little known to the mass of mankind, and I feel very anxious to obtain some of them. As to the kidney potatoe, it is the *king* of the genus, for all purposes except *baking*, where the lady finger is unsurpassed. I have raised 65 bushels of the latter this year from a fraction over one fourth of an acre. Can you do any thing for me in the way of procuring these two vegetables for seed?

A word as to *Sweet Corn*, and I will not tax your patience longer this time. I have ascertained to my entire satisfaction, that of all feed for fattening hogs—sweet corn is unsurpassed. Reasons:—It is nutritious—much more easily masticated, and consequently more perfectly digested; hogs are more fond of it—eat it more closely, and waste less of it; and

the pork made from it has a richness and a relish that I have never observed in any other. The objection to raising it extensively, will be, that it is a small variety, and will not pay—but this objection falls to the ground, when it is known that I have very recently, for the express purpose of growing for the purpose above mentioned, obtained from a gentleman in N. J., a very large sort of it, (full as large as the common eight rowed corn of this state) which I intend to plant next spring. I have not a great quantity, but will send enough for two or three hills, in a letter, to such as may wish.

A. H. Platt.

Remarks:—We raised, this season, what used to be called the *Coffee Bean*, in New England, from seed received from the Patent Office, under the name of *Tion House Kidney Beans*. They promised well, and we should have had a fine crop, but for the early frost which destroyed them. We wish to procure seed from some quarter before the next planting time.

Sweet Corn:—We have obtained a variety of very large *sweet corn*, by hybridizing the common *sweet*, with the *Tuscarora*. The kernel of this corn is the largest we have ever seen—being full five eighth of an inch in width in its shriveled state. It is eight rowed, and the ears as large as those of any other variety of corn raised in this latitude. It is superior to any other for the table. Whether this corn will maintain its present size in continued cultivation remains to be seen. We shall try it.

We have never seen or heard of the *genuine Kidney Potatoe* in this State, although we have made much inquiry for it.

Wintering Honey Bees.

Last spring, we heard much complaint throughout this section of country, about the loss of bees during the last winter; and as there was no lack of honey in the hives, in many instances, the probability is, that cold weather was the cause. We would caution those who are wintering bees, against leaving their hives exposed to the cold winds—or where they will be affected by sudden variations of temperature. We lost a very large swarm last winter, and the only cause we could assign for their death—was exposure to the extreme cold weather of February. On examining the hive in March, we found a great mass of dead bees on the floor board, and upon removing the hive into a warm room, and removing the comb, we found several pounds of honey, but very few living bees.

A correspondent (S. H. Stockwell) of the New England Farmer, in answer to an inquiry as to the cause of the destruction of bees in winter, when they have plenty of honey in their hives, says, "I would like to ask your subscriber, if in those hives which he has seen, the bees were not clustered where there was no honey in the comb? I have no doubt they were; then the reason is plain. They died from the long continued spell of cold weather, for had they changed their position in the extreme cold weather, it would have been death; so rather than to break their cluster and let in a chill that would be death to them, they remain and die when honey is almost within their reach. I have noticed many so, and have no doubt that is the cause of their destruction—it is the long continued cold weather that destroyed them. Sometimes they die for want of numbers to keep up a proper warmth in the hive; then the anchor frost proves destructive. Bees should be watched close in so *steady* a cold winter as this has been, (1851–2) and if you find a swarm that does not answer to the call, carry them in to a good warm fire and warm them up, and let them change their position, and then return them to their place. To have bees winter well, put your swarms into hives of medium size, and a good swarm in that shape is more likely to winter than otherwise.

Exportation of Potatoes:—The Sheboygan Lake Journal says, "large quantities of potatoes are being bought in this village, and shipped for Buffalo. This is reversing the order of things somewhat. This commodity not long since, was imported by our tradesmen to considerable extent. The crop in this county is very abundant and sound."

Wintering Domestic Animals.

Within the wide range of science and practice of farming, there is none of higher importance and of more influence on the weal and woe of the farmer, than the sustenance of his domestic animals during the winter. It is indeed a matter of surprise, that industrious, money-and-time-saving as our farming community generally is, they but too often neglect to pay the necessary attention to the important subject just mentioned.

Protection against the inclemency of the weather is needed by beast as well as man, and whoever neglects to provide this, is guilty of a shameful disregard of the duties he, as a man owes to his dumb dependent, and to his own welfare and self interest.

If those farmers, for instance, who suffer their sheep to be exposed to the rigor of the weather, were aware of the damage done thereby to the quality of their wool, and to the value of the animal, they would cheerfully perform the labor required to provide against such losses. Many are possessed of the foolish idea, that because sheep have a thick coat of wool, they need no shelter. But look at the torn-off and loose fleeces of such sheep in the ensuing spring, and experience will teach you that you were sadly mistaken in your calculations. *Poor* in flesh and *poor* in wool, they will never do for the butcher, and shear on an average one-half less than they ought to.

It is an old but true saying, that "A *want* of comfort is always a *want* of flesh." Therefore provide good stables, sheds and shelter for all your cattle, horses and swine. They will remunerate you at the proper time for the attentions bestowed upon them. If you have an abundance of straw, or if your barns or sheds are in a poor condition, you can make cheap shelters in an easy and expeditious way by building pens of large poles or rails, enclosing a space about one foot wide, and covering the top as well as filling the space at the sides with straw. This kind of cheap shelter will serve for every kind of stock.

Shelter being provided, another actual condition for the welfare of your stock during the winter, is to have them *sufficiently* provided with *food*. If this should not be the case, you had better sell a part of your stock, even if it were at a reduced price, and reserve your food for the rest. Save your fodder the best way you can, and have your hay well cut, and, if possible, sprinkled with brine, unless it has been moderately salted when put into the barn. Feed well, but economically.

Keep your stock well provided with pure clear water at all times in the winter season. If you can avoid it, don't suffer them to walk through the mud to obtain their drink, but keep it ready for them in your barn-yard.—In many cases, where this is not done, cattle and sheep will get their feet frozen, and hoof and foot ail will be the natural consequence of it.

"The eye of the master makes the horse grow fat." If you would have your live stock flourish in winter, let it have your own careful supervision daily; separate the weak from the strong, and those which are too young to have attained full strength, from those which have already arrived at maturity. If you have a vicious, ill-natured animal, sell it, if you can, at any reasonable price; otherwise it will make as much mischief in your barn-yard as a quarrelsome, malignant inmate in your family.

Begin to feed out a little hay or grain early, so that your stock may come into winter quarters in good condition. If you do this, you will find that "well summered" will be "half-wintered." Shelter them carefully from the storm, make eave troughs to carry the water from the roofs of the barns and sheds, so as to keep the barn yard dry, give the stock abundance of clean dry bedding if you can, feed them well (not over-feeding them at one time and starving them at another,) and let them have free access to water at all times.—Let "waste not, want not, spare not," be your motto, and your success is reasonably certain.

[Wool Grower.

THE BASKET WILLOW.—About five millions of dollars worth of the basket willow, are annually imported, at from $100 to $250 per ton. Mr. Haynes, of Putnam county, N. Y., cultivates the osier used for baskets, and says he makes a profit of $150 per acre. As good, can be grown here as in France or Germany, where most of that we get is grown. The best for baskets is the *Salix Viminatis*. It is asserted that it can be profitably produced in this country at $50 a ton. It is not confined to wet or marshy soils, but can be grown on clayey uplands.

Management and Profit of Fowls.

Most persons are trying to obtain the largest hens, I think that small hens are much more profitable as layers. They will lay more eggs than those of the larger breeds, and they can be kept at half the expense of those that are extremely large. My object is to obtain the hens that will yield the most eggs according to the expense. I have purchased a pair of Poland top-knots, from which to raise stock, for the year. They weigh about seven pounds to the pair.

Preparation of Food for Hogs.

It is a general opinion and believed to be founded on correct observation, that the food given to hogs should be slightly soured, in order to produce the greatest possible effect in improving their condition. In corroboration of this opinion, in Germany and some other parts of Europe, horses are fed on bread that has been fermented so as to be a little soured, and it is said to be more economical than feeding them with grain. Bread which is brought by the process of fermentation very near to the point of acidity, and that in general use amongst our German population, quite to that point, is well known to be more wholesome and much more nutritious than unleavened bread. Hence it is not unreasonable to suppose that all farinaceous substances fed to animals would be more economically and beneficially applied by being first slightly fermented. In order more effectually to accomplish this object in preparing food for hogs, two tubs should be procured of such size as would be adapted to the number to be fed, in which to prepare their food; these should be used to feed from, alternately; the materials in one would be undergoing the necessary preparation, while feeding from the other. The weather being generally cool while hogs are fattening, the process of fermenting progresses slowly and if it is very cold it is entirely suspended, unless artificial means are resorted to, to keep it up. Pieces of stale bread, that are no longer fit for family use, and which find their way into the swill tub, are uniformly found to put the whole contents into a state of fermentation, if suffered to remain for a few hours. This has suggested the opinion that a small quantity of yeast which is a cheap article, might with advantage be added to the contents of the tub containing the food for swine, in order to more quickly & thoroughly bring it into a complete state of fermentation and advance it to slight acidity before it is fed. This addition need not often be made provided the tub was replenished with food before it was quite emptied of its fermented contents, and in this way it could be kept up during the feeding season. Corn or other grain that has been steamed, boiled, or well soaked is very susceptible of the influences of yeast. Starch makers and distillers use it in order to prepare the grain, so that they can extract their respective articles of manufacture from it with more facility, and in greater quantities; and it appears reasonable to suppose the stomachs of animals would have their labor abridged, and would be enabled to extract a greater quantity of nutriment from a given quantity of grain or vegetable matter thus prepared, than when it is fed to them in the usual way.

The stages of fermentation are the saccharine, the vinous, the acetous, and the putrefactive; the first is exhibited in malting of barley, which is rendered sweet by it; the second is shown in the working of cider or beer; the third is noticed in the souring of bread, and in the formation of vinegar, and the fourth is discovered in the decomposition of bodies generally. In the preparation of food for hogs, it is believed it should advance to the third stage but not pass through it, for after it enters the fourth and last stage of fermentation, it would be very prejudicial to the health of animals, and could not contribute to their nourishment in any way whatever. [Farmers Cabinet.]

Raising Flax.

At the last annual meeting of the Tippecanoe Co. (Ind,,) Agricultural Society, the principal subject of discussion was the culture of flax. The Hon. H. L. Ellsworth, late commissioner of patents, delivered an address, in which he stated that a committee had been sent from Philadelphia to France, Holland, England, and Prussia, for the purpose of examining the modes of cultivation, best soil, &c., and that the committee had reported favorably as to the adaptation of our soil and climate for raising this important product.

The company who sent this mission abroad possessed a heavy capital, which they have invested in the manufacture of the article.—They offer to make a contract with him for $100,000 worth, and they offered for flax delivered in Philadelphia, equal to Russian, $250 per ton. Mr. E. stated that he had sent by mail for a sample of the quality, and intended to enter into the arrangement, provided a similar kind could be raised upon the prairie lands. He had selected seven or eight different kinds of land, upon which he had sown different kinds of seed, from one to two bushels to the acre, to test the yield of seed and lint. At the price named, the lint would be worth $40 per acre. There was a machine coming from Springfield for dressing flax. A man and a boy, with it could work out one and a half tons of stems a day. There can be fourteen bushels of seed raised to the acre. This will yield nett $6. He had no doubt but that flax was the best article to cultivate in this country, as a greater value could be got into a smaller compass than of any other product our soil and climate could raise. If the oil should be manufactured here, the cake would furnish superior fattening food for cattle. It is now sold to export for that purpose.

HORTICULTURE.

Northwestern Pomological Convention.

We have received a lengthy report of the proceedings of this Convention, which met at Dixon, Ill., on the 29th, of Sept., from our friend and correspondent, Dr. JOHN A. KENNICOTT. It was intended for publication in the present number,—but for want of type, (the *Index* to the current volume, using up some *sorts*, required to set up the report,) we are compelled to defer it until next month. The attendance was much larger, than at any previous meeting of the Association. The proceedings will be found highly interesting to every one, at all interested in fruit culture.

For the Wisconsin & Iowa Farmer.

Spring Grove, Wis.

Nursery Business.

MR. MILLER:—We are considerably engaged in the Nursery business, and are desirous of benefiting by your experience, as well as by that of your able correspondents, as to our soil and climate,—their effect upon imported fruit trees and seeds. We imported our stock of seed, grafts, and trees from New York—and which were selected with great care; but from observation it has occurred to us, that our climate and soil must materially change the quality of some of the apples as well as the growth of the trees. This opinion has been strengthened by remarks in your paper. Will you favor us with a list of the different kinds of apples known to suit well in this climate and most sought after here in the West?

Last year, we sowed a bushel of apple seed in April, and two bushels in May. Four years ago, we planted some seed brought from the southern part of Ohio. The season was favorable, but the seedlings did not do well.—Some seed from the state of New York,—planted three years after—grew as large as most of them the first summer; and none as small as the smallest of the Ohio seed.

Any information as to the best varieties of Pears and Grapes, for our climate, will be esteemed a favor. We shall experiment and write you occasionally.

VANDERBELT & Co.

REMARKS:—See proceedings of the Northwestern Fruit Growers Association, which will be found in the next number of the Farmer.—Seed should be taken from healthy fruit, from healthy trees; and a colder climate than the one you plant in. As to the best variety of pears, for general cultivation, we give the opinion of the N. England Farmer, in the remarks which follow. Whether the varieties here named, are better, or as well suited to our soil and climate, as others which might be named—is a question which some of of our Western Pomologists are more competent to answer than we feel able to do.

"Dwarf pear trees occupy but little space, and afford delicious fruit. They will almost grow in a flower pot. Even among the beds their shade is not injurious,—in a dry season, perhaps it is beneficial. The mother or daughters may cultivate them with ease, if the father and sons are too much occupied with other matters, or have not the taste. Those who wish to plant a few trees only, are often troubled to select those few from the long lists in the catalogues of the nurserymen. We have, therefore, selected the six pears which we should set, if we desired to put down only that number."

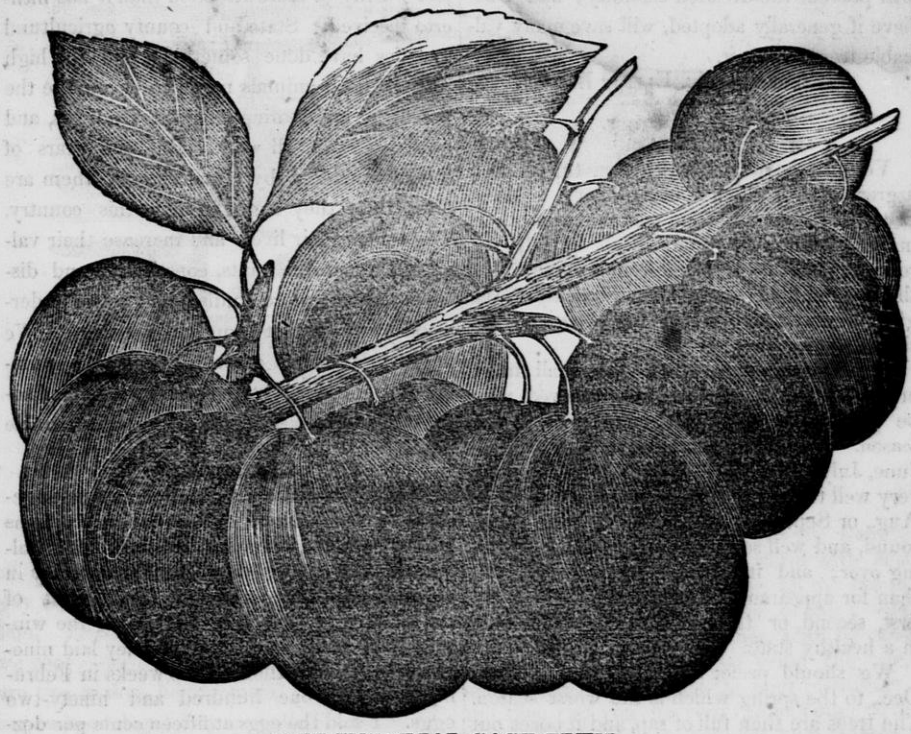
SIX BEST PEARS ON QUINCE STOCKS.

1. Louise Bonne de Jersey	for Fall.
2. Vicar of Winkfield	for Winter.
3. Buerre Diel.	for Fall.
4. Passe Colmar	for Winter.
5. Glout Morceau	for Winter.
6. Duchesse d'Angouleme	for Fall.

SIX BEST PEARS ON PEAR STOCKS.

1. Flemish Beauty	for Fall.
2. Golden Buerre of Bilboa	for Fall.
3. Fulton	for Fall.
3. Seckel	for Fall.
5. Dearborn's Seedling	for Very Early
6. Buerre d'Aremburg	for Winter.

TRANSPLANTING:—The Horticulturist says "If it were made a rule, in moving trees, always to reduce the last year's growth to *one bud*, half the failures in transplanting would not occur—because the head and roots would be bro't to something like a balance of power. Shortening in and mulching transplanted trees ought to be followed as established practical rules, in this climate, in transplanting every deciduous tree needing more care than a willow."



THE IMPERIAL GAGE PLUM.

It is sometimes said that plums are unwholesome fruit. This is not the case, however, if eaten at a proper period of ripeness, and in suitable quantities at the right time. Some of them are very delicious and strongly tempt the palate, and they are taken in excess; they are taken, also, not as most fruit should be, as a part of the meal, but as a luxurious indulgence after the actual wants of the system have been fully supplied. In such cases, any fruit is more or less hurtful.

The Imperial Gage, the subject of our engraving, has long enjoyed the reputation of the most excellent and productive of plums—It originated at Prince's Nursery, Flushing, N. Y. A single tree near Boston has produced fruit to the value of near fifty dollars annually, for some years. This plum is peculiarly fitted for *dry light* soils, where many sorts drop their fruit.

The tree grows freely and rises rapidly, and has long dark shoots and leaves, slightly downy. Fruit rather above medium size, oval, with a distinct suture. Stalk nearly an inch long, slightly hairy, and pretty stout, inserted in an even hollow. Skin pale green, until fully ripe, when it is tinged with yellow, showing a peculiar marbling of dull green stripes, and covered with copious white bloom. Flesh greenish, very juicy, melting and rich, with a very sprightly, agreeable flavor. The stone is oval and pointed at both ends. It is a great and regular bearer, and the fruit is therefore improved, by thinning when half grown. Ripens about the first of September. [N. E. Farmer.

For the Wisconsin and Iowa Farmer.

Fond Du Lac, Nov., 1852.

EDITOR FARMER:—I hear much complaint made by our orchardists and nurserymen of the damage done to apple trees, by the bursting of the bark, along the body of the tree and near the roots,—in many instances the injury is fatal to the tree. Without entering into a Physiological or Philosophical account of the causes which produce such cracking and peeling of the bark, I wish to state the remedy which I have found to be a successful preventive. In the month of June or fore part of July, take a common orchard knife or a good jack-knife, and make a slit in the bark from the top of the ground upwards, at least two thirds of the length of the body of the tree.—So far as my observation goes, this practice

will prevent the dreaded calamity; and I believe if generally adopted, will save many valuable trees. Try it.

Yours Truly, ELLIOT BROWN.

Time for Pruning.

Volumes have been written on this subject, a great part of which is mere theory. Many prune in the spring from custom, and others in June because the wound heals quickly, not reflecting that it is of more importance that the wound heal soundly than quickly. We give directions according to our experience for thirty years.

Slight pruning, in which very small limbs, or dead limbs of any size, are removed, may be performed, when most convenient, in any season. Moderate pruning should be done in June, July, or August, though it will answer very well till Dec. If trees are pruned in July, Aug., or Sept., the wood will become hard, sound, and well seasoned, and commence healing over; and it is not material, otherwise than for appearance, whether it heals over the first, second, or third year, as it will remain in a healthy state.

We should prefer Oct., or Nov., or even Dec., to the spring which is the worst season. The trees are then full of sap, and it oozes out at the wound, which turns black and decays, like a tree cut in the spring, and allowed to retain the bark. But if limbs ever so large are cut in Aug., or Sept., the wood will become hard and remain so, if it never heals over.

Thirty-two years ago, in Sept., we cut a very large branch from an apple-tree, on account of injuries by a gale. The tree was old, and it has never healed over; but it is now sound and is almost as hard as horn, and the tree perfectly sound around it. A few years before and after, large limbs were cut from the same tree in the spring; and where they were cut off, the tree has rotted, so that a quart measure may be put into the cavities. [Cole.

HORSES:—The Journal of the U. S. Agricultural Society says, "if it should be necessary to place every farmer in the Union on horseback, there are 4, 325, 652 horses in the country, for their service. Ohio has the honor of rearing and keeping more horses than any other State; the whole number reported being 463,397; New York had 447,014; Pennsylvania, 330,398; and Kentucky, 315,581.

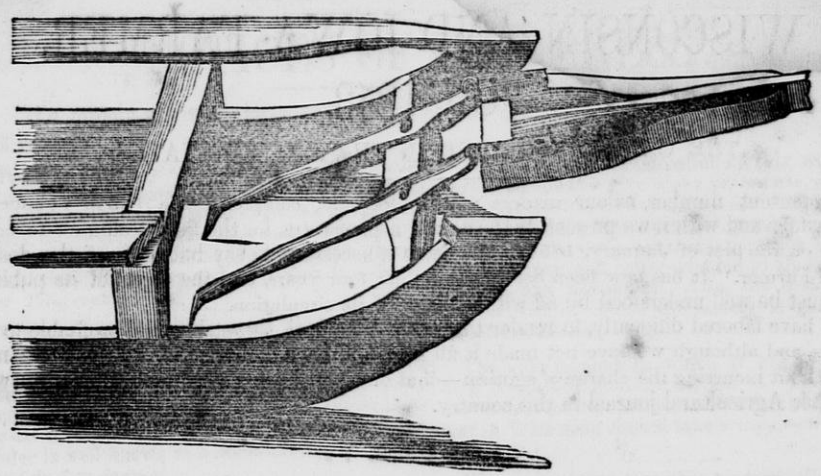
The improvement of four and a half millions horses, worth at least $200,080,000, is an object worthy of more attention than it has hitherto received. State and county agricultural societies have done something, and the high price of good animals more, to encourage the breeding and rearing of good roadsters, and good horses of all work. But the years of service rendered by a majority of them are fewer than they ought to be in this country. To prolong their lives, and increase their value, their natural wants, constitution and diseases must be more studied, and better understood by those that own and use them. We ought to excel all other nations in the number of fine horses, for we possess unequalled advantages for producing them to any desirable extent."

I will give you an account of my management the past winter. I kept twenty-five hens and a protector, of the native breed. My pullets that were hatched in May began to lay in December. I have not kept any account of the number of eggs they laid during the winter. The first week in January they laid ninety one eggs. In the first two weeks in February they laid one hundred and ninety-two eggs. I sold the eggs at fifteen cents per dozen, and during the winter the cost of keeping the hens was only equal to two fifths of the value of the eggs.

I gave my hens corn and cob meal every day mixed in milk or hot water. I kept oats, barley, and corn by them; I also kept all the egg shells during the summer, and gave them to the hens in the winter. I keep my hens in a house twenty by fifteen feet, with a large window in the south side. I find no difficulty in making my hens lay in the winter; most people fail by neglecting to supply animal food as a substitute for the numerous insects which they devour in summer.

Hens should be let out a few hours every day when the ground is bare. The best layers should be selected as breeders, and the protector changed every year. Grain should be kept by hens at all times during the year. The principal reason that some farmers find no profit in keeping hens, is because they only half feed them: therefore they are always in mischief, scratching for food. When farmers plant corn, they should give their hens a good supply. and they will not scratch it up. If hens are well managed, they afford more nett profit than any other stock. Young hens should always be kept over, as they will lay better in winter than old hens.

[Aurora of the Valley.



PATENT HOLD-BACK FOR SLEDS.

The above engraving represents an improved Hold-back for sleds, and which will be readily understood without any lengthy description. The *Scientific American*,—from which we copy,—says in substance, the hold-backs are two stakes, having metal pointed projecting ends or dogs; they are bolted on to the upper surface of the roller, and are attached by joints or swivel hinges to the hounds of the tongue. The hold-backs extend back under the front cross-brace of the sled, by which they are prevented from rising above a horizontal line with the roller when the animals are drawing. The least backing of the team, gives the roller a roll backwards, which throws the stakes downwards, and the sharp prongs are forced into the ice, snow, or ground—forming a rest to the team; the draft forward easily lifts the prongs out of the ice, &c., and relieves the hold-back.

Raising Rye.

In your last number, Mr. Bevens asks for a market for rye, and having had some experience in raising and using it, I will offer the results for the benefit of him and others, if they choose to avail themselves of it. For several years I have raised more or less rye, and have found it to be more profitable than wheat or corn. But I have never inquired for a market, nor would I sell a bushel where it might possibly get into the distiller's hands; for with my views of right and wrong, I can never, knowingly, be accessory to the indiscriminate murder of my species by feeding the fires which deluge the world with *evil spirits*. I have found use for all my rye in the shape of hog feed. And of this I can make more by the same labor, than by raising corn. Chop, or coarse grind the rye, soak or mash it, and feed the hogs plentifully, and they pay you for your labor better than the distiller will, and you will have a "conscience void of offence" as to making or abetting the making of "red or blue ruin." Boiled pumpkins, with a good portion of chopped rye, will make pork faster than corn. But corn will be necessary to top off with, to make the pork hard and firm. You may also feed calves, fatting cattle or horses with chopped rye mixed with cut straw, or even without, to very great advantage. But don't feed the rye to milch cows, neither as pasture, nor in the grain or meal, unless you wish to dry them up at once; for this it will do. The tendency of this grain seems to be more to making fat than milk; and will fat up any thing fed on it, in a most rapid manner.

As to its produce, it is generally much greater than wheat, and is the most certain crop that grows. It is seldom if ever winter-killed. And you may sow early or late. It may come up before winter sets in, or not, but you may be certain of a crop. Early sowed, however is the best.

The profits of it are greater than those of corn, for the same labor will produce double the number of bushels, and each bushel will make as much or more fat as a bushel of corn. Raise it, therefore, for feed; but for pity's sake never let the distiller get hold of it.

[Grant County Herald.] A. Bronson.

WISCONSIN AND IOWA FARMER, FOR 1853.

THE CHEAPEST PAPER IN THE UNITED STATES.

The present number, as our readers will understand, completes the fourth Volume of the Farmer and with it we present to the public, a prospectus for the fifth Volume—to commence on the first of January, 1853. We deem it necessary to say but little of the design of the Farmer. It has now been before the public four years, and the object of its publication must be well understood by all within range of its circulation.

We have labored diligently, to render the current Volume acceptable and profitable to its readers, and although we have not made it all we could have desired; yet, we think, we may say without incurring the charge of egotism—that our paper bears a favorable comparison with any other Agricultural journal in this country.

VOLUME V.

Will commence on the first of January, 1853.

The NORTHWESTERN CULTIVATOR has now been published FOUR YEARS—has taken its place among the permanent publications of the day, with a wide circulation throughout the Northwest, and its aims and objects are well understood. We have aimed thus far to adapt our paper to the practical wants of its readers, and have nothing to say in regard to the future, but to express a determination to still improve upon the past.

AGENTS AND SUBSCRIBERS.

It is very desirable that AGENTS make up their clubs of subscribers, as far as they can, and send them in by the 1st of January—that we may be able to determine at the commencement of the volume, something near the edition required. We do not *insist* on payment from agents, before the January number is delivered to subscribers, but we want their names, as far as possible, for the purpose stated.

Present subscribers will bear in mind, that they must renew their subscriptions, if they wish the paper continued; as, according to our terms, no numbers of the new volume, will be supplied unless ordered. We trust, that all our present patrons will not only renew their own subscriptions, but aid us in enlarging our list of subscribers, by sending along one or more new subscribers.

TERMS:

Fifty cents a year in advance—Five copies for $2,00, (if sent to one post office,)—Ten copies for $4,00, and any larger number at the same rate.

PREMIUMS.

1st. We will give to every person who sends us 15 subscribers, one extra copy of the Farmer.

2d. To every person who sends us 25 subscribers, two extra copies.

3d. To every person who sends us 30 subscribers, three extra copies, or any Agricultural Book ordered, worth $1,00, free of postage.

4th. To every person sending 40 subscribers, four extra copies, or any Agricultural Book they may order, worth $1,50, free of postage.

EACH NUMBER contains 24 large octavo pages, neatly enclosed with a colored cover, making a volume of 288 pages, illustrated with about 100 ENGRAVINGS of animals, Machines, Farm Buildings, Implements, Fruits, Flowers, Grains, Plants, Vegetables, &c.

NOTICES OF THE PRESS:

We subjoin a few of the many commendatory notices of the press in reference to the last volume:

We can only say that no necessity whatever exists for any Wisconsin farmer sending abroad for agricultural publications, as he can get all necessary information just as good and a little cheaper from this source as any other. No farmer should think of getting along without it.—*Southport Telegraph.*

We would take occasion to say, that no agricultural paper in the west is more ably conducted than the Wisconsin and Iowa Farmer, by Mark Miller, Janesville. Wood engravings are freely used to illustrate articles, and its correspondents appear to be men of practical knowledge. Mr. Miller is well known as a scientific agriculturist. *Fond du Lac Journal.*

We have received the January and February numbers of this excellent monthly. It contains a large amount of valuable reading matter, and every farmer should have a copy.—St. *Anthony, (Min.,) Express.*

It is now the handsomest agricultural publication we are acquainted with, and as Mr. Miller intends to devote his whole time to it, we doubt not it will compare favorably in every point of view, with the best journals in the country.—*Janesville Gazette.*

This number is, of itself, worth more than the subscription price for the whole volume. How it is published for 50 cents a year, and why it is not in every farmer's hands, are past our comprehension.—*Watertown Register.*

The Wisconsin and Iowa Farmer is now published at Janesville, by Mark Miller, its founder. It is furnished for 50 cents per annum, and it is certainly worth ten fold that to every farmer who should take it. Mr. Miller now devotes his entire time to it, and designs that it shall be, as he is capable of rendering it, one of the best Agricultural papers in the country.—*Milwaukee Wisconsin.*

We have frequently spoken in praise of this publication, and need now only add, that, "like cheese, it improves by age."—*Watertown Chron.*

It contains a good variety of interesting and useful matter, which should be perused by every farmer in the state. Its industrious and enterprising editor, Mr. Miller, spares no expense or labor to make it such as the requirements of the country at present demand. We understand that Mr. Miller has given up all other business and intends giving his entire attention to the publication of the Farmer.—*Racine Com. Adv.*

The March number of the Wisconsin Farmer has reached us. It is doing no more than justice to say of this paper, it is decidedly the best agricultural journal in the west. Every farmer should take a copy, and every town have a club of 10 at least.—*Madison Argus.*

After a careful examination of this work, we have concluded to give it our preference over all other Agricultural Journals—not because it is published in the State, yet that would be a good reason, but for the cause that its articles are generally plainer, and better adapted to all classes of farmers and mechanics. Also, the articles are shorter, and of course the variety is greater.—*Grant Co. Herald.*

The able manner in which it has heretofore been conducted guarantees that the future will not disappoint its readers, and we think every farmer in Wisconsin should take a copy.—*Wisconsin Statesman.*

We must confess that this pioneer of western husbandry, outstrips many of its northern competitors in its valuable contributions to agricultural husbandry. The "great west" presents a wide field for experiment, and at no very distant day will outrival her sister states in all that pertains to the science of agriculture. Our northern farmers will find it to their advantage to keep *posted up* on what their brethren of the west are doing. In this view we recommend the Wisconsin Farmer to their perusal.—*Boston Veterinary Journal.*

The work merits, as we hope it will receive, the cordial support of the farmers of the thriving and productive state in which it is published.—*Genesee Farmer.*

We are particularly pleased with this work, as the numerous extracts from it in our columns will show. And as we are authotized to act as agent we will cheerfully give in our commission if ten or twenty will direct us to order the work. We have not the doubt that the suggestions in this one work each year would more than save its subscription price ten times over to every practical farmer.—At least we are willing to test the accuracy of our remark by forfeiting the subscription price of the Star as a premium to any farmer who may think the experiment worth testing. Of course we shall depend on his honor to negative our assertion fairly. Who'll try?—*Marion (Iowa) Star.*

The Wisconsin & Iowa Farmer, for August, is before us. A neat and interesting work. We think it has improved considerably since its commencement. It is a valuable work to the agricultural community, and should be in the hands of all our farmers. It would bring them a fund of intruction in their line of business.—*Monroe Sentinel.*

The Wisconsin Farmer continues to make its regular appearance. Mr. Miller the publisher of this valuable monthly, deserves great credit for being the first to start and successfully carry on an enterprise so greatly calculated to benefit the agricultural interest. Every family should take a copy.—*Baraboo Standard.*

WISCONSIN FARMER.—This is the title of an excellent Agricultural paper published at Janesville, by Mark Miller. The press have been very liberal in its praise—and justly so—as we regard the Farmer in point of utility to the husbandman excelled by no other publication of the kind.—*Potosi Republican.*

EDITOR'S TABLE.

Removal of the Farmer Office.

The next number of the Farmer will be issued from our new office, which will be found in the NEW BRICK BLOCK, at the west end of the upper bridge. This is the most convenient location for our Agricultural friends, that could be made in the city—being situated in the immediate vicinity of the mills. and centrally, in regard to other business.

Having now completed arrangements, whereby we shall be entirely released from the care and labor of printing the Farmer, we shall hereafter have more time to devote to editorial duties. and to prepare engravings to illustrate and embellish it, than we have had heretofore.

During the past year we have had sole charge of the printing department, and likewise performed a large amount of the mechanical labors of the office,—nor have we received any assistance editorially. But since we are to be freed from this care and labor, we hope to make the WISCONSIN FARMER more worthy than ever, the liberal patronage bestowed upon it.

Index to Vol. IV.

It will be observed that we have printed the Index to the present Volume of the Farmer, on a separate sheet, so that it may be placed at the *beginning* of the Volume. Binders will understand how to arrange it.

Rock Co. Agricultural Society.

FARMERS of Rock, will bear in mind, that the Annual Meeting of the Rock Co. Ag. Society, occurs on Monday, the 6th of Dec. A full attendance is desired, as members will then renew their membership. Those who are not members, can become so, by subscribing their names to the constitution and paying one dollar.

ACKNOWLEDGMENTS.—We are under obligations to J. Roberts, Esq., of Beloit, for a basket of fine seedling apples; it contained sixteen varieties—some of superior flavor.

A. F. Lewis, Esq., of Turtle, will accept our thanks for specimens of seedling apples, grown in his orchard. Two varieties especially, were of excellent flavor and worthy of propagating extensively.

PLUMS.—We are indebted to James Caldwell, Esq., of Janesville, for a basket of this delicious fruit. Among the *nine* varieties presented to us, were some of great size and excellence. This acknowledgement should have been made at an earlier date, but was inadvertently mislaid.

Transactions of the second season of the American Pomological Society held in Philadelphia, in Sept. We are indebted to Col. M. P. Wilder, of Boston, for a copy of this interesting document.

M'CORD'S KAOLIAN SOAP.—This soap bears the test of trial, better than any other labor-saving soap we have ever used in our family, and, judging from the small quantity we have used—we think it will be found a valuable assistant to housekeepers.

By simply soaking the clothes in suds made with it, many articles are made ready for rinsing, without *any* labor of pounding or rubbing and —clothes *much soiled* require but very little rubbing to cleanse them. As *no boiling* is required, it saves *fuel* as well as time and labor. It does not injure the hands, and is warranted not to injure any fabric. From our short acquaintance with it, we consider it a great improvement. It is afforded at about the same price as the best brown bar soap.

Ezra Birchard, Esq., of Yorkville, Racine Co., is authorized to sell *rights* for manufacturing this soap in Wisconsin.

Ezra Birchard Esq., of Yorkville, Racine Co., is agent for the sale of the *Upland Bell Cranberry* plants, which variety bears the largest and finest fruit we have ever seen. They may be set out in Spring or Autumn. Mr. B, has generously bestowed 250 of the above plants upon us, which we have carefully planted. Mr. B. informs us that he is prepared to furnish any desired number of the plants to persons desirous of raising this fruit in their gardens, or of cultivating it on a more extensive scale. Mr. Birchard receives these plants from Sullivan Bates Esq., of Bellingham, Mass. who has been for several years successfully engaged in their cultivation. They can be safely packed and sent by express or otherwise to any desired point.

WESTERN EDUCATIONAL MAGAZINE.—We hail this new laborer in the cause of western literature, with cordial good will, and shall be glad to hear of its good success. Published monthly at Galena, by John F. Howe, Editor. 50 cents a year.

WESTERN HORTICULTURAL REVIEW.—We fully endorse all we have before said in favor of this work. May it be abundantly prospered. It is published monthly by Dr. John A Warder, in Cincinnatti, at $3,00 per annum.

OHIO FARMER.—This is one of the largest and best Agricultural Family newspapers in this country, and we are glad to hear of its increasing prosperity. Edited and published by Thos. Brown, of Cleveland, at $2,00 per year. Now is a good time to subscribe for the new Vol. which commences in Jan., 1853. Prospectus in our next issue.

SCIENTIFIC AMERICAN.—The increasing popularity and wide circulation given to this valuable paper, are conclusive evidence of its intrinsic worth. Mechanics and Manufacturers will find it an invaluable assistant. Munn, & Co., New York, Publishers. $2, per annum. See prospectus next issue

A lump of wet saleratus, applied to the sting of a wasp or bee, will stop the pain in one moment and prevent it from swelling. Try it and see. It is a sure remedy for rattlesnake bites, if applied immediately, and is always on hand. Be sure and remember it.

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1853

WISCONSIN FARMER.

A MONTHLY JOURNAL

DEVOTED TO

NORTHWESTERN AGRICULTURE, HORTICULTURE,

AND THE MECHANIC ARTS.

Fifth Year of Publication.

MARK MILLER, PUBLISHER AND EDITOR.

JANESVILLE, WIS.

VOL. V. OCTOBER, 1853. NO. 10.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS.

POSTAGE SIX CENTS PER YEAR.

EVER AND ALWAYS AHEAD!!

ANOTHER GREAT ARRIVAL OF THE SEASON.

Competiion to the World's Fair Exhibition!

In quantity and quality of the most beautiful and modern fabrics; the looms of Persia, China France and England, have sent us some of their choicest productions, which we are now exhibiting to the gaze and admiration of an

ASTONISHED COMMUNITY.

Among our Mammoth Stock may be found the following Goods:

1000 yds. beautiful double Satin Brocade Silks, all shades, from 8s. up. Also a splendid article of black and white for mouring.

do plain, plaided, striped and changeable Oil Silks, astonishing low.

1000 yds. real Italian black oil silks, we will sell you a good article at 6s. per yard.

500 yards plain and changeable Turk Satins, all colors.

1000 yds. do do real Irish Poplins, cheaper than the cheapest.

do do Plain and striped Boehmian Grass Cloth,

do do China, crape and berege delaines, very low.

500 yds. do at the astonishing low price of 6¼cts. per yard.

LAWNS, LAWNS, LAWNS,

In endless variety, of all kinds, colors and patterns. 1000 plain and fancy Lawns, usually sold at 1s. 6d., now only 6¼ cts. 10,000 fast colors, English, French and Scotch Ginghams, only 12½ cts. 1000 Parasols, from 18 cts. to $10. 10,000 linen pocket kerchiefs—we will sell 5 good all linen for 25 cts., also a large lot of best French embroideries and edging, consisting of new and durable styles muskateer collars, under kerchiefs sleeves, flouncing, worked bands, edgings and insertings, unusually low.

SHAWLS, SHAWLS, SHAWLS!

In this department we are prepared to suit every variety of taste, having a complete assortment from some of the most distinguished manufacturers of Europe, consisting of embroidered and plain Canton crape, some special patterns, rich embroidered French Merino and Thibeth—do. with 12 inch sewing silk Fringes. 500 real Italian black and fancy shawls. 100 long and square Paisley Broche shawls. 500 silk tissue berege, cashmere and delaines and scarfs Jaconet, Dotted, Swiss, Book, Bishop, Victoria, Cambric, Striped. Plaided and embroidered muslins, all prices. 10,000 bonnets, of every style and quality. In bonnets we beat the world. 1000 bonnets at 6¼ cts. each.—Our arrangements and facilities for purchasing are now complete. In consequence of our increasing business, and consequently large purchases, we are now importing the greater portion of the above goods—having a perfect knowledge of the European Markets, we are fully able to compete with Eastern importers and can say without fear of contradiction that we can and will outsell and undersell any firm in the great west.

1000 coats, pants and vests—warrented to fit. 500 good, all linen coats at $1 each. 10,000 pairs boots and shoes, which we will make our enemies sael, and give our patrons a good and durable understanding. 1000 chests choice peoples flavor Old Hyson Tea, only 5s. 1000 do do Janesville flavor Young Hyson, from 3s up.

Pedlars, Country Merchants and Milliners

supplied at exactly New York jobbing prices, adding transportation, for cash and nothing else.—30 cords of sheeting, drillings, tickings, denims Southern yarn and warp. 30 do do English and American prints, of every style and quality. People af Rock and adjoining counties, remember our sign and motto—the Peoples Auction store admits no rival, knows no opposition.

McKEY & BRO.,
Importers, Jobbers and Retailers of dry and fancy goods, Main st. Janesville.
Janesville, July 1852.

JAMES SUTHERLAND,

WHOLESALE AND RETAIL

BOOKSELLER AND STATIONER,

KEEPS Constantly on hand a large and general assortment of School Books, Miscellaneous, Fancy, Toy, Medical, Law, Theological and Sunday School Books Also, Books on Agriculture and the Mechanic arts, together with a general assortment of Family and Pocket Bibles, Hymn and Prayer Books. Also an unrivaled stock of Wall and Curtain Paper, Slates, Gold and Steel Pens, Writing, Wrapping, Printing, Note and Envelope Paper: Blank Books, Deeds, Mortgages, Justice's Blanks, Envelops, Ink, Quills, Globes, Letter-Presses, Outline Maps, and every thing else, in the line of a first class Book Store.—Merchants, District Boards, and dealers generally, are cordially invited to call.

N. B. The highest price paid for Rags.
Store, No. 2,, Lappin's Block, Janesville, Wis.
May 1st, 1852. 1y5

MADISON MUTUAL
INSURANCE COMPANY.

Chartered by an Act of the Legislature of the State of Wisconsin.

HAVING duly organized and complied with the requirements of their charter, and adopted the most approved system of MUTUAL INSURANCE, are now prepared to receive applications and issue policies of insurance upon dwelling houses, taverns, shops, and other buildings against loss or damage by fire. This company will insure no property in cities or exposed parts of villages, therefore can never sustain a large loss from any one fire, which will enable them always to meet losses promptly, and make it a safe and reliable company to those insured.

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SOMETHING NEW

AT THE

Wisconsin Boot, Shoe and Leather Store.

Ready-Made Clothing

AND

GENTLEMEN'S FURNISHING GOODS

The only thing that has been lacking heretofore in Janesville.

I HAVE just received, in addition to my extensive stock of Boots and Shoes, Leather and Findings, the largest and most complete assortment of

READY-MADE CLOTHING, AND GENTLEMEN'S FURNISHING GOODS,

Ever brought into the interior of Wisconsin, and can assert with due propriety that I can and will

Sell at Lower Prices,

Than any other concern in the city of Janesville, simply from these facts, to wit: that dealing exclusively in these articles, and buying from the manufacturers themselves, and that too very largely, I certainly can purchase my goods at much lower rates than those who buy but small stocks in this line, as is the case with our Dry Goods Merchants, which in connection with the lightness of my expenses, compared with gentlemen of families, enables me of course, as every one can see, to sell at

Lower Prices and Smaller Profits.

But as gassing is so much the order of the day, particularly with the Auction Shops, and other quack concerns about town, I will give you the prices of some of the articles that are to be found among my tolerably good sized stock of Boots, Shoes, Leather, Findings, Ready-Made Clothing, Gentlemen's Furnishing goods, &c., &c.

BOOTS AMD SHOES.

In this line can be found 1000 pair Satin Framsa Gaiters, from $1 to $1,50, such as cannot be bought about town for less than $1,50 to $2. 2,000 pair Calf Bootees from 75 cts. to $1. 1000 pair Goat Bootees, expressly for summer wear, from 7s to 9s—never sold less than 10s and 12s. 1000 pair Enameled Buskins 7s to 8s. Also, an endless variety of childrens' and misses Shoes, at prices to correspond.

MEN'S WEAR.

In this line I defy competion. Being engaged extensevely in the manufacturing of Boots and Shoes, and buying my materials in the eastern markets at very low rates, I am positive that I can sell my work at lower prices than can be found at the small shops about town.

Good Calf Boots eastern made, 16s to 20s.
Warranted Kip, do., 14s to 20s.

Such as cannot be bought in Janesville for less than 20s and 22s.

Leather and Findings.

Of these I have and shall keep constantly on hand a full assortment, and can furniah Country Manufacturers at Milwaukee and Chicago prices.

Ready-Made Clothing and Gentlemen's Furnishing Goods.

Having entered into an arrangement with an eastern manufacturer, whereby I am enabled to buy at very low rates, I have been induced to go into this trade in connection with Boots and Shoes, and I do know beyond a doubt, that I can sell any thing in this line at as low or lower prices, as any concern this side of the Manufacturer's door, of whom I bought them, the very strong assertions that have emanated from these so called extensive clothing ware rooms, to the contrary notwithstanding.

I can show you in this branch of trade 500 good Linen Coats, for 6s each. 500 pair Summer Pants, 4s to 8s. Fine Doe Skin Cassimere Pants, from three to four dollars a pair; together with the largest assortment of Coats, Vests, Shirts, Collars, Socks, Cravats, Gloves and, in fact, everything that belongs to gentlemen's wear, that can be found in Janesville. In conclusion, allow me to say that Dry Goods and Groceries I know nothing about, but when you come to Boots, Shoes, and Ready-Made Clothing, I say again, and I say it boldly, that I can distance the crowd.

Call at the WISCONSIN BOOT, SHOE, and CLOTHING STORE, three doors above the Post Office. and for once be convinced.

TO FARMERS.

N. B. I have 500 pair of good Kip and Stogy Boots, eastern make, and just the thing for summer wear, that I will sell exactly at cost, for this reasen—I shall hereafter manufacture all of my Boots, and consequently would like to dispose of what eastern work I have on hand Gentlemen, I mean what I say—you shall have them precisely at cost, and that is from 11s to 16s. So call soon. J. B. DIMOCK.

Janesville, May 16, 1853. v5n6

PITT'S

CORN AND COB MILL.

This celebrated Mill is now made and sold by H. A. Pitts, the inventor, at his shop, West Randolph Street, Chicago, better known as H. Witbeck's Wagon and Plow Manufactory.

This Mill reduces the corn and cob to a proper degree of fineness by a different mode from any other mill in use, and is undoubtedly the best in existence. It will grind the cob and corn, if it is wet or dry, better and more of it, with less power, than any other. It is more durable and more easily kept in condition to grind than any mill ever before offered to the farmer H. A. PITTS.

March, 1853

Fruit and Ornamental Trees &c.

THE SUBSCRIBERS have the pleasure of announcing an immense stock of trees for the Autumn trade embracing

STANDARD TREES FOR ORCHARDS.

DWARF AND PYRAMIDAL TREES, for Gardens.

ORNAMENTAL TREES. for Streets, Parks and Pleasure Grounds,

RARE AND BEAUTIFUL LAWN TREES.

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EVERGREEN TREES, embracing the rarest species of Pines, Firs, Spruces, Yews Cedars, Junipers, &c.

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ROSES, of all classes, and embracing the newest and best sorts,

DAHLIAS, the finest and best sorts,

CHRYSANTHEMENNS, including the finest of the new pompone varieties.

PHLOXES AND PEONIES, Superb collections.

BEDDING PLANTS, a complete assortment.

BULBOUS ROOTS, just imported from Holland and of the first quality.

HEDGE PLANTS.

BOX EDGING.

RHUBARB, ASPARAGUS, &c., &c.

The favorable season has given everything a vigorous and fine growth. All orders, whether for larger or smaller quantities, executed with the greatest care, and in strict compliance with the wishes of the purchaser. Packing done in the most secure and skillful manner, so that parcels can be transmitted thousands of miles with safety.

Nurserymen and dealers in trees will be supplied on the most liberal terms. The following Catalogues are sent *gratis* and *post-paid* to all who apply and enclose one postage stamp for each.

No. 1 Descriptive Catalogue of Fruits.
No. 2. " " Ornamental Trees
No. 2. " " Dahlias, Greenhouse Plants, &c.
No. 4. Wholesale Catalogue.

ELLWANGER & BARRY.
Mount Hope Nurseries.
Sept., 1st, 1853. Rochester, N. Y.

☞NOTICE☜

To Farmers.

ANY one wishing to obtain the Suffolk Breed of Hogs, can obtain the same of C S. BLANCHARD, M. D., of East Troy, Walworth County, Wisconsin.

Residence half mile West of East Troy.
Troy, March 28, 1853. v5n5

The New Edition of

LAPHAM'S POCKET MAP

OF WISCONSIN, showing the surveys of the Menomonee Lands, &c., may now be had at the bookstores, or by application (accompanied by the cash) to the undersigned. It will be sent by mail to any address upon the receipt of one dollar. A liberal discount made to dealers.

I. A. LAPHAM.
Milwaukee, January, 1853.

CHARLES ROSS' IMPROVED

CONICAL FRENCH BURR STONE GRIST MILLS,

To which have been awarded **18** premiums by different Societies for the best *Portable Mills* for grinding wheat, rye, buckweat and feed, Mineral paint, dry or in oil or water; also Drugs Spices &c.,and are the best Mills ever invented for grinding over Middlings in Flouring Mills. They may be propelled by water, wind, steam or horse-power, doing their work with great *rapidity and perfection*, saving over 30 per cent. in power and easily kept in perfect order, being the only true mills for Farmers and Planters use. Being made of the best French Burr Stone they are little effected by use,and can be re-dressed, when necessary by any person of ordinary capacity, plans and full directions being given to use and keep them in good order. The smaller sizes are admirably adapted to the wants of Emigrants and others,being perfect Grist Mills in miniature; these Mills are 5 sizes, viz; Hand Mills with crank, 130 lbs., price $75. Second size 290 lbs$ 100. 3d do. 360 lbs., $140. 4th do. gristing mills, 450 lbs., $170. 5th do. verticle flouring mills 900 lbs., $300. Orders should state the kind of grinding they are wanted for, or general grinding. For particulars or Mills, address Chs. Ross, Rochester, N. Y., or J. Sedgebeer, General Agt., Ashtabula, Ohio, or W. P. Hammond, J. H. Jenkins, and G. W. Taylor, Janesville; Messrs. Purple & Bacon, Waukegan, Wis. Sept., 1853. 1y

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FASHION.

J. R. Beal will introduce the Fall Fashion for Hats—of Beebe's issue—in the market, on Friday, the 26 inst.

Janesville, August 22.

L Moses,

MANUFACTURER of Cabinet Ware.—Ready Made Coffins constantly on hand. Metalic do. furnished to order Shop on the west side of the River.

Janesville.

1000 BOOK AGENTS WANTED!!

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1000 DOLLARS A YEAR!!

WANTED, in every County of the United States, active and enterprising men, to engage in the sale and publications of some of the best books published in the country. To men of good address, possessing a small capital of from $25 to $100, such inducements will be offered as to enable them to make from $3 to $5 a day profit.

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